

Fig.1.

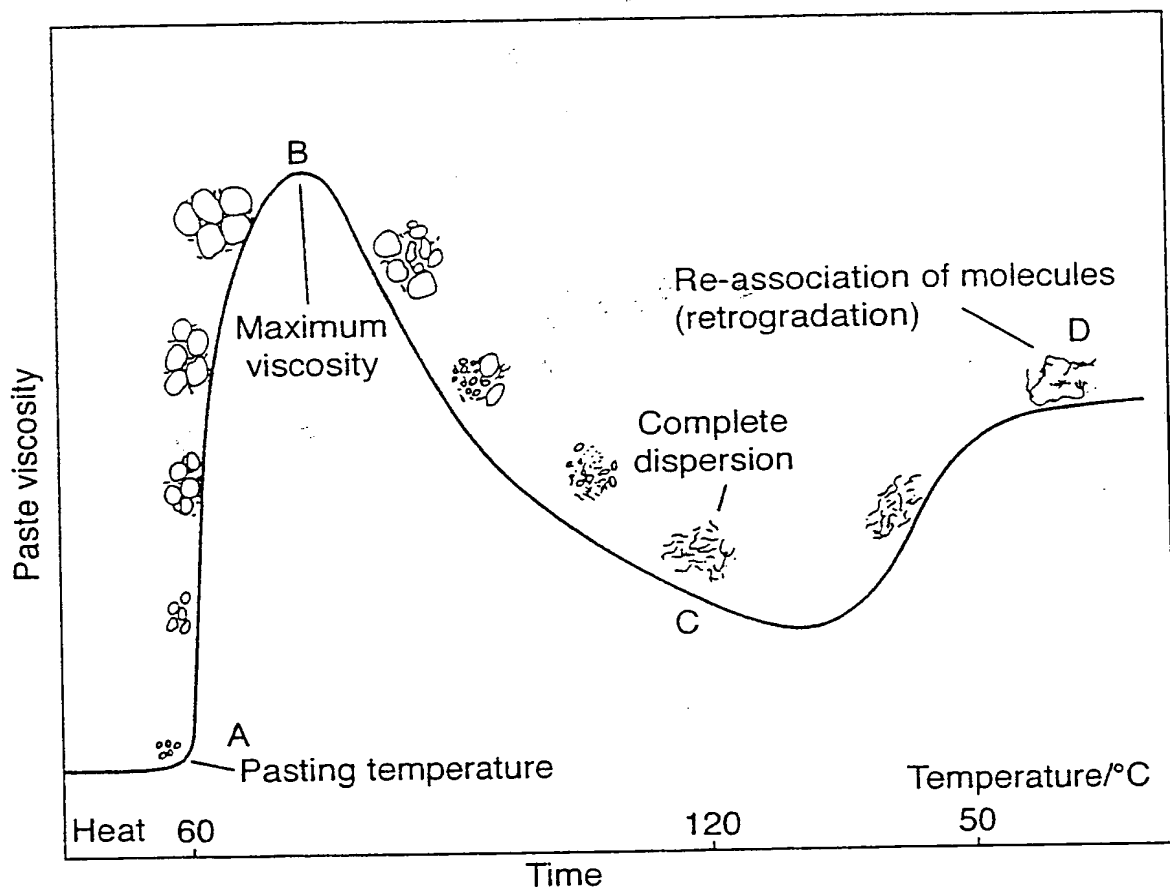


Fig. 2(i)

[illegible]

Fig.2(ii)

44	DYRSEY	IRRA	AD	QHEG	GL	EA	FS	RG	YK	KL	GF	TS	AE	GI	TY	RE	WA	PG	GA	HS	AA	LV	GD	FNN	OsbeII-JALL					
628	DYRSEY	KRLR	AA	ID	QHEG	GL	DA	FS	RG	YK	KL	GF	TS	AE	GI	TY	RE	WA	PG	GA	YS	AA	LV	GD	FNN	Wheat SBEII-2				
440	EYRSLY	RRIR	IS	DI	EH	EG	GL	EA	FS	RG	YK	KL	GF	TS	AE	GI	TY	RE	WA	PG	FA	SA	AL	VGD	FNN	ZMSBE2a				
496	EYRSLY	RRIR	IS	DI	EH	EG	GL	EA	FS	RG	YK	KL	GF	TS	AE	GI	TY	RE	WA	PG	FA	SA	AL	VGD	FNN	ZMSBE2b				
2																									Barley SBEIIa					
2																									Barley SBEIIb					
611	EYRSLY	RRIR	LR	SD	ID	QY	EG	GL	ET	FS	RG	YK	KL	GF	FN	HS	AE	GV	TY	RE	WA	PG	GA	HS	AA	LV	GD	FNN	RICBCE3	
611	EYRSLY	RRIR	LR	SD	ID	QY	EG	GL	ET	FS	RG	YK	KL	GF	FN	HS	AE	GV	TY	RE	WA	PG	GA	HS	AA	LV	GD	FNN	RICESBE-1/97	
766	DFRYGQ	YKRI	RE	EE	DK	YK	EG	GL	DA	FS	RG	YK	KL	GF	FN	TS	AE	GI	TY	RE	WA	PG	GA	KS	AA	LV	GD	FNN	PSSBEIGEN	
457	RHRMKR	YVQK	ML	IE	KY	EG	PL	EE	FA	QY	LG	FN	RE	DC	CI	VY	RE	WA	PA	AA	QE	DE	VI	IG	DF	FNG			STSBE	
304	SVRMKX	YLQK	HS	IE	KE	HG	LS	EE	FS	KGY	LK	FG	IN	TE	DA	TV	YR	EW	AP	AA	MD	QL	IG	DF	FNN			TASBEI		
331	DVTRNR	VIQK	HL	IE	KE	HG	LS	EE	FS	KGY	LK	FG	IN	TE	DA	TV	YR	EW	AP	AA	MD	QL	IG	DF	FNN			TASBEID2		
311	KYRMKR	FLQK	GS	IE	EN	EG	SL	EE	FS	KGY	LK	FG	IN	TE	DA	TV	YR	EW	AP	AA	MD	QL	IG	DF	FNN			ZMSBEI		
296	MYRKR	YLQK	CL	IE	KE	HG	LS	EE	FS	KGY	LK	FG	IN	TE	DA	TV	YR	EW	AP	AA	MD	QL	IG	DF	FNN			RICBEI		
292	KYRLKR	YLH	HQ	KL	IE	EY	EG	GL	QE	FA	KGY	LK	FG	IN	TE	DA	TV	YR	EW	AP	AA	MD	QL	IG	DF	FNG			PSSBEIIGN	
44	WNPADT	MTTR	DD	YG	WE	IF	LP	NA	DG	SP	PI	PH	GS	SR	VK	VR	MD	TP	SG	GI	KD	SI	PA	WI	KY	SV	Q	OsbeII-JALL		
808	WNPADT	MTTR	DD	YG	WE	IF	LP	NA	DG	SP	PI	PH	GS	SR	VK	VR	MD	TP	SG	GI	KD	SI	PA	WI	KY	SV	Q	Wheat SBEII-2		
620	WNPADT	MTTR	DD	YG	WE	IF	LP	NA	DG	SP	PI	PH	GS	SR	VK	VR	MD	TP	SG	GI	KD	SI	PA	WI	KY	SV	Q	ZMSBE2a		
676	WNPADT	MTTR	DD	YG	WE	IF	LP	NA	DG	SP	PI	PH	GS	SR	VK	VR	MD	TP	SG	GI	KD	SI	PA	WI	KY	SV	Q	ZMSBE2b		
2																											Barley SBEIIa			
2																											Barley SBEIIb			
791	WNPADT	MTTR	DD	YG	WE	IF	LP	NA	DG	SP	PI	PH	GS	SR	VK	VR	MD	TP	SG	GI	KD	SI	PA	WI	KY	SV	Q	RICBCE3		
791	WNPADT	MTTR	DD	YG	WE	IF	LP	NA	DG	SP	PI	PH	GS	SR	VK	VR	MD	TP	SG	GI	KD	SI	PA	WI	KY	SV	Q	RICESBE-1/97		
346	WNPADT	MTTR	DD	YG	WE	IF	LP	NA	DG	SP	PI	PH	GS	SR	VK	VR	MD	TP	SG	GI	KD	SI	PA	WI	KY	SV	Q	PSSBEIGEN		
637	WNSNMM	EKQD	QF	GV	WV	SI	RI	PD	-V	DS	KP	AI	PH	NS	SR	VK	FR	FK	HG	NG	VW	DR	IP	AW	IK	YAT	ATA	STSBE		
484	WNSGHR	MTKD	NY	GV	WV	SI	RI	SH	-V	NG	KP	AI	PH	NS	SR	VK	FR	FK	HG	NG	VW	DR	IP	AW	IK	YAT	ATA	TASBEI		
511	WNSGHR	MTKD	NY	GV	WV	SI	RI	SH	-V	NG	KP	AI	PH	NS	SR	VK	FR	FK	HG	NG	VW	DR	IP	AW	IK	YAT	ATA	TASBEID2		
491	WNSGHR	MTKD	NY	GV	WV	SI	RI	SH	-V	NG	KP	AI	PH	NS	SR	VK	FR	FK	HG	NG	VW	DR	IP	AW	IK	YAT	ATA	ZMSBEI		
476	WNSGHR	MTKD	NY	GV	WV	SI	RI	SH	-V	NG	KP	AI	PH	NS	SR	VK	FR	FK	HG	NG	VW	DR	IP	AW	IK	YAT	ATA	RICBEI		
472	WNSGHR	MTKD	NY	GV	WV	SI	RI	SH	-V	NG	KP	AI	PH	NS	SR	VK	FR	FK	HG	NG	VW	DR	IP	AW	IK	YAT	ATA	PSSBEIIGN		
185	TPGDI	--	PYN	GI	YD	PP	EE	EE	KY	VF	KHP	QK	RP	KS	LR	IE	TH	VG	MS	SS	PE	PK	IN	TY	AN	FR	DE	OsbeII-JALL		
985	APGEI	--	PFM	GI	YD	PP	EE	EE	KY	VF	KHP	QK	RP	KS	LR	IE	SH	IG	MS	SS	PE	PK	IN	TY	AN	FR	DE	Wheat SBEII-2		
797	APGEI	--	PYN	GI	YD	PP	EE	EE	KY	VF	KHP	QK	RP	KS	LR	IE	SH	IG	MS	SS	PE	PK	IN	TY	AN	FR	DE	ZMSBE2a		
853	APGEI	--	PYN	GI	YD	PP	EE	EE	KY	VF	KHP	QK	RP	KS	LR	IE	SH	IG	MS	SS	PE	PK	IN	TY	AN	FR	DE	ZMSBE2b		
149	A																										Barley SBEIIa			
149	A																										Barley SBEIIb			
968	AAGEI	--	PYN	GI	YD	PP	EE	EE	KY	VF	KHP	QK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	RICBCE3		
968	AAGEI	--	PYN	GI	YD	PP	EE	EE	KY	VF	KHP	QK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	RICESBE-1/97		
1123	APGEI	--	PYN	GI	YD	PP	EE	EE	KY	VF	KHP	QK	RP	KS	LR	IE	SH	IG	MS	SS	PE	PK	IN	TY	AN	FR	DE	PSSBEIGEN		
814	DATKFA	APYD	GV	WV	DD	PP	SS	ER	YH	EY	KY	PR	PK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	STSBE	
661	DATKFA	APYD	GV	WV	DD	PP	SS	ER	YH	EY	KY	PR	PK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	TASBEI	
685	TASBEI	GA	PYD	GL	HW	DD	PP	SS	ER	YH	EY	KY	PR	PK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	TASBEID2
665	DASKFG	APYD	GV	WV	DD	PP	SS	ER	YH	EY	KY	PR	PK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	ZMSBEI	
653	DASKFG	APYD	GV	WV	DD	PP	SS	ER	YH	EY	KY	PR	PK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	RICBEI	
649	DPTFAA	APYD	GV	WV	DD	PP	SS	ER	YH	EY	KY	PR	PK	RP	KS	LR	IE	TH	VG	MS	SS	TE	PK	IN	TY	AN	FR	DE	PSSBEIIGN	

Fig.2(iii).

359	OsbeII-1ALL	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1159	Wheat SBEII-2	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1171	ZMSBE2a	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1027	ZMSBE2b	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1149	Barley SBEIIa	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1149	Barley SBEIIb	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1142	RICBCE3	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1142	RICESBE-1/97	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
1297	PSSBEIEN	VLPRIKRL	LGYN	AVQI	MAIQ	EH	SY	YG	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G	L																						
994	STSBE	VLPRIKRL	AN	YNTV	QI	MA	IM	EH	SD	SA	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G																					
841	TASBEI	VLPRIKRL	AN	YNTV	QI	MA	IM	EH	SD	SA	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G																					
865	TASBEID2	VLPRIKRL	AN	YNTV	QI	MA	IM	EH	SD	SA	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G																					
845	ZMSBEI	VLPRIKRL	AN	YNTV	QI	MA	IM	EH	SD	SA	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G																					
833	RICBEI	VLPRIKRL	AN	YNTV	QI	MA	IM	EH	SD	SA	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G																					
829	PSSBEIEN	VLPRIKRL	AN	YNTV	QI	MA	IM	EH	SD	SA	SF	GV	HT	N	-	FF	AP	SS	RR	FG	ST	PE	DL	K	SL	ID	RA	HE	L	G																					
536	OsbeII-1ALL	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1336	Wheat SBEII-2	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1148	ZMSBE2a	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1204	ZMSBE2b	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
149	Barley SBEIIa	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
149	Barley SBEIIb	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1319	RICBCE3	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1319	RICESBE-1/97	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1474	PSSBEIEN	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1171	STSBE	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1018	TASBEI	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1042	TASBEID2	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1022	ZMSBEI	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1010	RICBEI	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
1009	PSSBEIEN	VLMDEV	VHSH	ASNN	T	LD	GL	NG	FD	-	-	-	-	-	GT	D	TH	YF	HG	GS	R	G	H	H	W	M	D	S	R	V	F	N	Y	G	N	K	E	V	I	R	F	L									
707	OsbeII-1ALL	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1507	Wheat SBEII-2	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1319	ZMSBE2a	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1375	ZMSBE2b	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
149	Barley SBEIIa	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
149	Barley SBEIIb	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1490	RICBCE3	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1490	RICESBE-1/97	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1645	PSSBEIEN	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1351	STSBE	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1198	TASBEI	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1222	TASBEID2	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1202	ZMSBEI	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1190	RICBEI	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D
1186	PSSBEIEN	LSNARW	WLE	EYK	F	D	G	F	R	F	D	G	A	T	S	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	F	G	F	A	T	D	V	D	A	V	V	Y	L	M	L	M	N	D

Fig.2(iv)

887	L I H G F Y P E A V I I G E D V S G M P T F A L P V Q V G G V G F D Y R L H M A V A D K W I E L L K - G N D E A W E M G	OsbelII-1ALL
1687	L I H G L H P D A V S I G E D V S G M P T F C I P V P D G G V G L D Y R L H M A V A D K W I E L L K - Q S D E S W K M G	Wheat SBEII-2
1499	L I R G L Y P E A V S I G E D V S G M P T F C I P V Q D G G V G F D Y R L H M A V P D K W I E L L K - Q S D E Y W E M G	ZMSBE2a
1555	L I H G L Y P E A V I I G E D V S G M P T F A L P V H D G G V G F D Y R L H M A V A D K W I D L L K - Q S D E T W K M G	ZMSBE2b
149		Barley SBEIIa
149		Barley SBEIIb
1670	L I H G L Y P E A I I I G E D V S G M P T F A L P V Q D G G V G F D Y R L H M A V P D K W I E L L K - Q S D E S W K M G	RICBCE3
1670	L I H G L Y P E A I I I G E D V S G M P T F A L P V Q D G G V G F D Y R L H M A V P D K W I E L L K - Q S D E S W K M G	RICESBE-1/97
1825	L I H G L F P E A V S I G E D V S G M P T F C L P T Q D G G I G F N Y R L H M A V A D K W I E L L K - K Q D E D W K M G	PSSBEIEN
1531	L I H K I F P D A T V I A E D V S G M P G L G R P V S E G G I G F D Y R L A M A I P D K W I D Y L K N K D D L E W S M S	STSBE
1378	L M H K L L P E A T V A E D V S G M P V L C R S V D E G G V G F D Y R L A M A I P D R W I D Y L K N K D D L E W S M S	TASBEI
1402	L M H K L F P E A T V A V D V S G M P V L C R P V D E G G L G F D Y R L A M A I P D R W I Q A M T I P D R W I D Y L K N K D D Q Q W S M S	TASBEID2
1382	L M H K L L P E A T V A E D V S G M P V L C R P V D E G G V G F D Y R L A M A I P D R W I D Y L K N K D D S E W S M G	TASBEI
1370	L M H K L L P E A T V A E D V S G M P V L C R P V D E G G V G F D Y R L A M A I P D R W I D Y L K N K D D R K W S M S	RICBEI
1366	L V H D I L P D A T I A E D V S G M P G L G R P V S E V G T G F D Y R L A M A I P D K W I D Y L K N K K D S E W S M K	PSSBEIEN
1064	N I V - H T L T N R R W P E K C V T Y A E S H D Q A L V G D K T I A F W L M D K D M Y D F M A L N G P S T P S I D R G I	OsbelII-1ALL
1864	D I V - H T L T N R R W L E K C V T Y A E S H D Q A L V G D K T I A F W L M D K D M Y D F M A L D R P S T P R I D R G I	Wheat SBEII-2
1676	D I V - H T L T N R R W L E K C V T Y C E S H D Q A L V G D K T I A F W L M D K D M Y D F M A L D R P S T P R I D R G I	ZMSBE2a
1732	D I V - H T L T N R R W L E K C V T Y A E S H D Q A L V G D K T I A F W L M D K D M Y D F M A L D R P S T P T I D R G I	ZMSBE2b
149		Barley SBEIIa
149		Barley SBEIIb
1847	D I V - H T L T N R R W S E K C V T Y A E S H D Q A L V G D K T I A F W L M D K D M Y D F M A L D R P A T P S I D R G I	RICBCE3
1847	D I V - H T L T N R R W S E K C V T Y A E S H D Q A L V G D K T I A F W L M D K D M Y D F M A L D R P A T P S I D R G I	RICESBE-1/97
2002	D I V - H T L T N R R W L E K C V V Y A E S H D Q A L V G D K T I A F W L M D K D M Y D F M A L D R P S T P L I D R G I	PSSBEIEN
1711	E - I V T S L T N R R Y T E K C I A Y A E S H D Q S I V G D K T I A F L M D K E M Y S G M S C L T D A S P V V D R G I	STSBE
1558	G - I A H T L T N R R Y T E K C I A Y A E S H D Q S I V G D K T I A F L M D K E M Y T G M S D L Q P A S P T I D R G I	TASBEI
1582	S V I S O L T N R R Y P E K F I A Y A E R Q N H S I I G S K T M A F L M E W E T Y S G M S A M D P A S P T I D R A I	TASBEID2
1562	E - I A H T L T N R R Y T E K C I A Y A E S H D Q S I V G D K T I A F L M D K E M Y T G M S D L Q P A S P T I D R G I	TASBEI
1550	E - I V Q T L T N R R Y T E K C I A Y A E S H D Q S I V G D K T I A F L M D K E M Y T G M S D L Q P A S P T I M R G I	RICBEI
1546	E - I S L N L T N R R Y T E K C V S Y A E S H D Q S I V G D K T I A F L M D E E M Y S S M S C L T H L S P T I E R G I	PSSBEIEN
1241	A L H K M I R L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R G P Q V L P T G K F I P G N N N S Y D K C R - R	OsbelII-1ALL
2041	A L H K M I R L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R G P Q L P T G K V L P G N N N S Y D K C R - R	Wheat SBEII-2
1853	A L H K M I R L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R G P Q S L P N G S V I P G N N N S F D K C R - R	ZMSBE2a
1909	A L H K M I R L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R G P Q R L P S G K F I P G N N N S Y D K C R - R	ZMSBE2b
149		Barley SBEIIa
149		Barley SBEIIb
2024	A L H K M I R L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R A P Q V L P N G K F I P G N N N S Y D K C R - R	RICBCE3
2024	A L H K M I R L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R A P Q V L P N G K F I P G N N N S Y D K C R - R	RICESBE-1/97
2179	A L H K M I R L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R G E O H L P N G K I V P G N N N S Y D K C R - R	PSSBEIEN
1888	A L H K M I H F F T M A L G G E G Y L N F M G N E F G H P E W I D F P R E - - - - - G N N S Y D K C R - R	STSBE
1735	A L Q K M I H F F T M A L G G O G Y L N F M G N E F G H P E W I D F P R E - - - - - G N N S Y D K C R - R	TASBEI
1762	A L Q K M I H F F T M A F G G D S Y L X F M G N E -	TASBEID2
1739	A L Q K M I H F F T M A L G G O G Y L N F M G N E F G H P E W I D F P R E - - - - - G N N S Y D K C R - R	TASBEI
1727	A L Q K M I H F F T M A L G G O G Y L N F M G N E F G H P E W I D F P R E - - - - - G N N S Y D K C R - R	RICBEI
1723	S L H K M I H F F T L A L G G E G Y L N F M G N E F G H P E W I D F P R E - - - - - G N G W S Y E K C R L T	PSSBEIEN

Fig.2(v)

1418	RFDLGDADY	FLRYHGM	GMQFDDQAMQHLEEKY	GFMSTSDHQYVSRKHH	EEDKVIIVFEKKGDLVFVF	OsbeII-1ALL
2218	RFDLGDADY	FLRYHGM	GMQFDDQAMQHLEEKY	GFMSTSDHQYVSRKHH	EEDKVIIVFEKKGDLVFVF	Wheat SBEII-2
2030	RFDLGDADY	FLRYHGM	GMQFDDQAMQHLEEKY	GFMSTSDHQYVSRKHH	EEDKVIIVFEKKGDLVFVF	ZMSBE2a
2086	RFDLGDADY	FLRYHGM	GMQFDDQAMQHLEEKY	GFMSTSDHQYVSRKHH	EEDKVIIVFEKKGDLVFVF	ZMSBE2b
149						Barley SBEIIa
149						Barley SBEIIb
2201	RFDLGDADY	FLRYHGM	GMQFDDQAMQHLEEKY	GFMSTSDHQYVSRKHH	EEDKVIIVFEKKGDLVFVF	RICBCE3
2201	RFDLGDADY	FLRYHGM	GMQFDDQAMQHLEEKY	GFMSTSDHQYVSRKHH	EEDKVIIVFEKKGDLVFVF	RICESBE-1/97
2356	RFDLGDADY	FLRYHGM	GMQFDDQAMQHLEEKY	GFMSTSDHQYVSRKHH	EEDKVIIVFEKKGDLVFVF	PSSBEIIGN
2032	QWNLADSEHLRYKFM	NAFDRAMNSLDEKFSFLA	SGKQIVSSMDDDKKVVVFERGDLVFVF	TASBEI		STSB
1879	QWNLADSEHLRYKFM	NAFDRAMNSLDEKFSFLA	SGKQIVSSMDDDKKVVVFERGDLVFVF	TASBEI		TASBEI
1837	QWNLADSEHLRYKFM	NAFDRAMNSLDEKFSFLA	SGKQIVSSMDDDKKVVVFERGDLVFVF	TASBEI		TASBEI
1883	QWNLADSEHLRYKFM	NAFDRAMNSLDEKFSFLA	SGKQIVSSMDDDKKVVVFERGDLVFVF	TASBEI		TASBEI
1371	QWNLADSEHLRYKFM	NAFDRAMNSLDEKFSFLA	SGKQIVSSMDDDKKVVVFERGDLVFVF	TASBEI		TASBEI
1870	QWNLADSEHLRYKFM	NAFDRAMNSLDEKFSFLA	SGKQIVSSMDDDKKVVVFERGDLVFVF	TASBEI		TASBEI
1398	NFHWNSYFDRVUGC	LKPGKVKVVLDSADAG	LFGGFGRIRHHTAEHFTS	DCQHNDNRPHSFS		OsbeII-1ALL
2398	NFHWNSYFDRVUGC	LKPGKVKVVLDSADAG	LFGGFGRIRHHTAEHFTS	DCQHNDNRPHSFS		Wheat SBEII-2
2210	NFHWNSYFDRVUGC	LKPGKVKVVLDSADAG	LFGGFGRIRHHTAEHFTS	DCQHNDNRPHSFS		ZMSBE2a
2266	NFHWNSYFDRVUGC	LKPGKVKVVLDSADAG	LFGGFGRIRHHTAEHFTS	DCQHNDNRPHSFS		ZMSBE2b
149						Barley SBEIIa
149						Barley SBEIIb
2301	NFHWNSYFDRVUGC	LKPGKVKVVLDSADAG	LFGGFGRIRHHTAEHFTS	DCQHNDNRPHSFS		RICBCE3
2301	NFHWNSYFDRVUGC	LKPGKVKVVLDSADAG	LFGGFGRIRHHTAEHFTS	DCQHNDNRPHSFS		RICESBE-1/97
2356	NFHWNSYFDRVUGC	LKPGKVKVVLDSADAG	LFGGFGRIRHHTAEHFTS	DCQHNDNRPHSFS		PSSBEIIGN
2212	NFHPKNTYEGYKVGCDL	PGKVRVALDSADAL	VFGGHGRVGHVDHFTS	PEGVPVPVP		STSB
2059	NFHPKNTYEGYKVGCDL	PGKVRVALDSADAL	VFGGHGRVGHVDHFTS	PEGVPVPVP		TASBEI
1960	NFHPKNTYEGYKVGCDL	PGKVRVALDSADAL	VFGGHGRVGHVDHFTS	PEGVPVPVP		TASBEI
2063	NFHPKNTYEGYKVGCDL	PGKVRVALDSADAL	VFGGHGRVGHVDHFTS	PEGVPVPVP		TASBEI
2051	NFHPKNTYEGYKVGCDL	PGKVRVALDSADAL	VFGGHGRVGHVDHFTS	PEGVPVPVP		TASBEI
2050	NFHPKNTYEGYKVGCDL	PGKVRVALDSADAL	VFGGHGRVGHVDHFTS	PEGVPVPVP		TASBEI
1775	VYTPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		OsbeII-1ALL
2575	VYTPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		Wheat SBEII-2
2387	VYTPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		ZMSBE2a
2443	VYTPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		ZMSBE2b
149						Barley SBEIIa
149						Barley SBEIIb
2558	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		RICBCE3
2558	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		RICESBE-1/97
2713	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		PSSBEIIGN
2377	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		STSB
2224	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		TASBEI
2059	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		TASBEI
2228	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		TASBEI
2216	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		TASBEI
2215	VYSPSRT	CVVYAPM	TAKCSIRHMAVAVASTSKKSYGQYHQVQ	GLIRVCFNESWIDK		TASBEI

Fig. 2(vi):

[illegible]

Fig. 2A.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1		67.9	68.8	71.4	85.7	81.6	71.4	72.5	66.8	46.6	45.4	30.4	45.5	45.5	44.4	1	
2		14.9		84.3	80.6	85.7	100.0	79.2	78.1	77.6	48.5	49.9	36.7	50.0	49.9	48.0	2
3		13.9	14.6		81.0	87.8	93.9	81.7	78.1	75.9	47.1	49.5	37.5	49.9	49.7	48.1	3
4		10.5	22.2	21.3		85.7	79.6	86.1	86.1	75.9	49.4	50.9	36.5	50.5	50.6	49.0	4
5		11.5	15.9	13.4	15.9		85.7	85.7	85.7	85.7	32.7	26.5	30.6	30.6	28.6	36.7	5
6		16.6	0.0	6.4	23.9	15.9		79.6	79.6	87.8	36.7	32.7	32.7	32.7	28.6	42.9	6
7		10.3	23.5	22.7	14.3	15.9	23.9		100.0	75.8	50.0	50.5	37.5	51.2	50.7	49.1	7
8		20.8	26.3	26.0	14.3	15.9	23.9	0.1		67.9	49.9	51.0	37.9	51.9	51.3	49.5	8
9		29.3	24.5	26.6	27.4	15.9	13.4	28.7	39.5		47.9	49.1	37.2	50.0	50.0	48.1	9
10		66.2	57.7	60.3	58.1	91.7	79.9	58.0	65.5	67.4		68.3	49.0	71.1	70.0	72.6	10
11		68.4	58.6	59.3	58.2	121.4	98.3	57.1	66.1	67.5	38.2		58.7	82.6	83.3	67.9	11
12		88.4	88.7	89.9	84.9	118.1	95.3	85.1	93.8	96.7	58.8	38.0		57.2	58.5	46.7	12
13		66.6	60.0	61.1	59.6	127.2	102.3	57.8	65.7	67.9	33.8	19.1	41.1		85.2	71.4	13
14		67.8	59.8	60.9	59.2	105.4	105.4	58.0	67.7	67.2	36.4	16.6	38.2	14.9		70.1	14
15		65.7	60.0	61.1	59.3	79.9	64.6	57.2	66.6	68.5	28.8	38.9	61.0	33.1	34.9		15
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		



Fig.3(i).

	10	20	30	40	50	Majority
	A T A T G T A T G A T T T C A T G G C T C T G G A T G G A C C T T C G A C T C C T C G T A T T G A T					SEQ ID No:53
1	A T - - - G T A T G A T T T C A T G G C T C T G A A C G G A C C T T C G A C G C C T A A T A T T G A T					B2.seq
1	A T - - - G T A T G A T T T C A T G G C T C T G A A C G G A C C T T C G A C A C C T A A T A T T G A T					B4.seq
1	A T - - - G T A T G A T T T C A T G G C T C T G A A C G G A C C T T C G A C G C C T A A T A T T G A T					B10.seq
1	A T A T G T A T G A T T T C A T G G C T C T G G A T A G A C C T T C A A C T C C T C G C A T T G A T					A2.seq
1	A T A T G T A T G A T T T C A T G G C T C T G G A T A G A C C T T C A A C T C C T C G C A T T G A T					B1.seq
1	A T A T G T A T G A T T T C A T G G C T C T G G A T A G A C C T T C A A C T C C T C G C A T T G A T					B11.seq
	C G T G G C A T A G C A T T G C A T A A A A T G A T T A G G C T T G T C A C C A T G G G T T T A G G					Majority
49	C G T G G A A T A G C A C T G C A T A A A A T G A T T A N A C T T A T C A C A A T G G G T T T A G G					B2.seq
49	C G T G G A A T A G C A C T G C A T A A A A T G A T T A G A C T T A T C A C A A T G G G T T T A G G					B4.seq
49	C G T G G A A T A G C A C T G C A T A A A A T G A T T A G A C T T A T C A C A A T G G G T T T A G G					B10.seq
51	C G T G G C A T A G C A T T A C A T A A A A T G A T T A G G C T T G T C A C C A T G G G T T T A G G					A2.seq
51	C G T G G C A T A G C A T T A C A T A A A A T G A T T A G G C T T G T C A C C A T G G G T T T A G G					B1.seq
51	C G T G G C A T A G C A T T A C A T A A A A T G A T T A G G C T T G T C A C C A T G G G T T T A G G					B11.seq
	T G G A G A G G G T T A T C T T A A C T T T A T G G G A A A T G A G T T T G G G C A T C C T G A A T					Majority
99	C G G A G A G G G T T A T C T T A A C T T T A T G G G A A A T G A G T T C G G G C A T C C T G A A T					B2.seq
99	A G G A G A G G G T T A T C T T A A C T T T A T G G G A A A T G A G T T C G G G C A T C C T G A A T					B4.seq
99	A G G A G A G G G T T A T C T T A A C T T T A T G G G A A A T G A G T T C G G G C A T C C T G A A T					B10.seq
101	T G G C G A A G G C T A T C T T A A C T T T A T G G G A A A T G A G T T T G G G C A T C C T G A A T					A2.seq
101	T G G C G A A G G C T A T C T T A A C T T T A T G G G A A A T G A G T T T G G G C A T C C T G A A T					B1.seq
101	T G G C G A A G G C T A T C T T A A C T T T A T G G G A A A T G A G T T T G G G C A T C C T G A A T					B11.seq
	G G A T A G A T T T C C A A G A G G C C C A C A A G T T C T T C C A A C T G G T A A G T T T C T C					Majority
149	G G A T A G A C T T T C C A A G A G G C C C A C A A G T A C T T C C A A G T G G T A A G T T C A T C					B2.seq
149	G G A T A G A C T T T C C A A G A G G C C C A C A A G T A C T T C C A A G T G G T A A G T T C A T C					B4.seq
149	G G A T A G A C T T T C C A A G A G G C C C A C A A G T A C T T C C A A G T G G T A A G T T C A T C					B10.seq
151	G G A T A G A T T T C C A A G A G G G T C C G C A A A C T C T T C C A A C C G G C A A A G T T C T C					A2.seq
151	G G A T A G A T T T C C A A G A G G G T C C G C A A A C T C T T C C A A C C G G C A A A G T T C T C					B1.seq
151	G G A T A G A T T T C C A A G A G G G T C C G C A A A C T C T T C C A A C C G G C A A A G T T C T C					B11.seq

Fig.3(ii).

	C	C	T	G	G	A	A	T	A	C	A	A	T	A	G	T	T	A	T	G	A	T	A	A	T	G	C	C	G	T	C	G	T	A	G	A	T	T	G	A	T	C	T	T	G	G		Majority																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367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Fig. 3(iii).

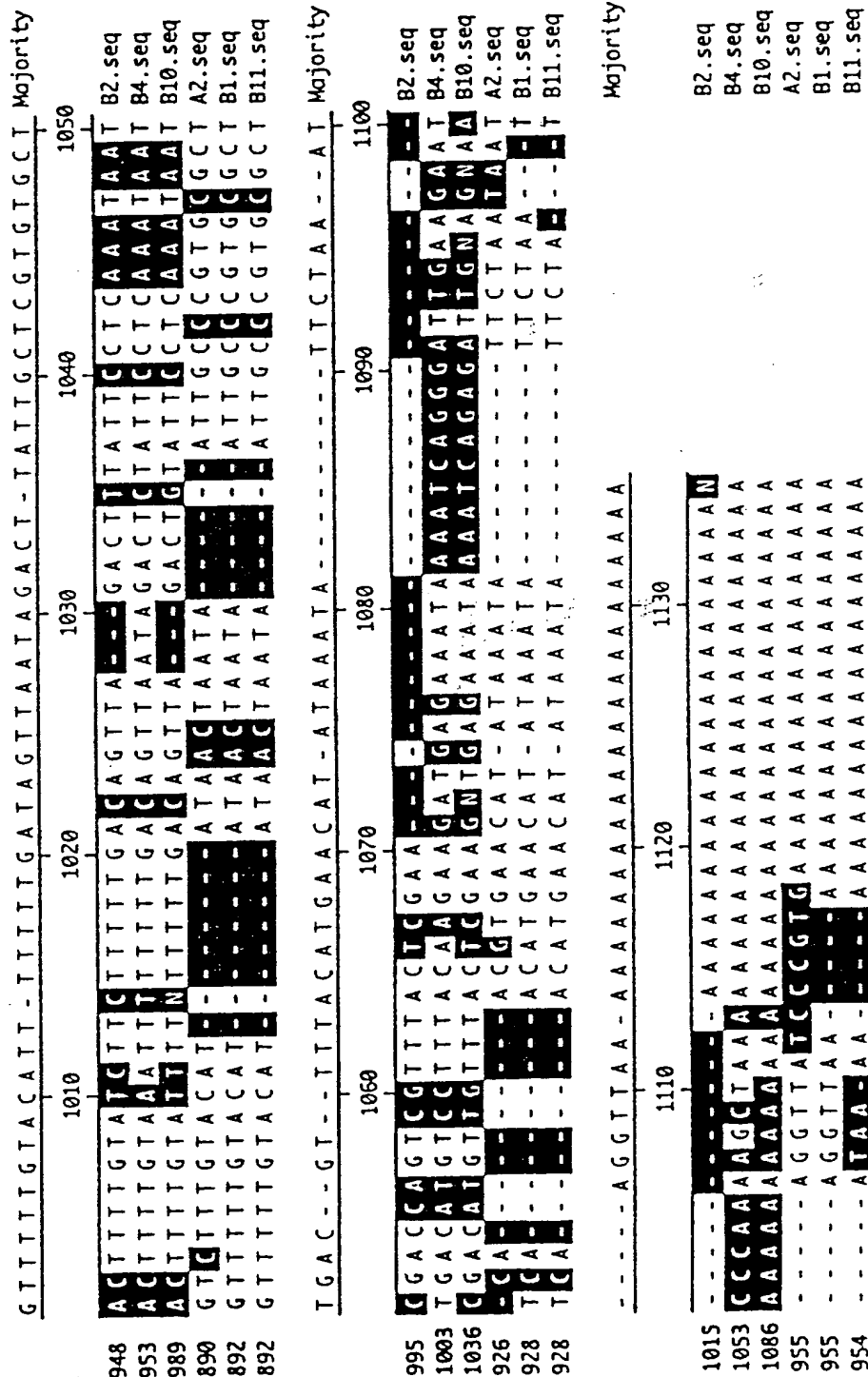
	410	420	430	440	450	Majority
3399	C	T	T	C	A	C
3399	C	T	T	C	A	C
3399	C	T	T	C	A	C
401	T	T	C	A	C	T
401	T	T	C	A	C	T
401	T	T	C	A	C	T
Majority	G	T	T	C	A	C
449	G	T	T	C	A	C
449	G	T	T	C	A	C
449	G	T	T	C	A	C
451	G	T	T	C	A	C
451	G	T	T	C	A	C
451	G	T	T	C	A	C
Majority	G	T	T	C	A	C
499	G	T	T	C	A	C
499	G	T	T	C	A	C
499	G	T	T	C	A	C
501	G	T	T	C	A	C
501	G	T	T	C	A	C
501	G	T	T	C	A	C
Majority	G	T	T	C	A	C
549	C	A	C	T	G	A
549	C	A	C	T	G	A
549	C	A	C	T	G	A
551	C	A	C	T	G	A
551	C	A	C	T	G	A
551	C	A	C	T	G	A



Fig.3(v).

	A	T	C	G	C	C	A	T	G	G	C	G	T	T	G	G	A	G	G	G	A	T	C	G	T	G	T	A	T	-	G	C	T	T	G	T		Majority											
	810	820	830	840	850																																												
794	-	T	C	C	C	C	A	G	G	C	G	T	T	G	T	G	A	A	A	A	A	C	A	T	G	T	C	T	C	A	T	T	T	T	A	T		B2.seq											
798	A	T	T	C	C	C	A	G	G	C	G	T	T	G	N	G	N	G	A	A	A	A	C	A	T	G	T	C	T	C	A	T	T	T	T	A	T		B4.seq										
793	-	T	C	C	C	C	A	G	G	N	G	T	T	G	T	G	A	A	A	A	A	C	A	T	G	T	C	T	C	A	T	-	-	T	T	T	A	T		B10.seq									
736	A	G	C	C	C	A	T	G	A	C	-	-	T	G	G	A	G	G	G	A	T	C	G	T	G	C	C	T	T	C	C	C	C	A	G	A		A2.seq											
736	A	G	C	C	C	A	T	G	A	C	-	-	T	G	G	A	G	G	G	A	T	C	G	T	G	C	N	T	C	T	C	C	C	A	G	A		B1.seq											
736	A	G	C	C	C	A	T	G	A	C	-	-	T	G	G	A	G	G	G	A	T	C	G	T	G	C	C	T	T	C	C	C	T	G	A		B11.seq												
	860	870	880	890	900																																												
	G	G	A	T	C	A	G	-	G	A	T	G	G	A	A	C	-	T	C	C	C	T	A	G	G	T	A	G	C	C	G	C	T	C															
843	G	G	A	T	C	A	G	C	G	A	C	G	A	A	C	T	T	C	C	C	C	C	A	A	A	T	A	C	C	-	-	-	-	-	-	-	-	-	B2.seq										
848	G	G	A	T	C	A	G	N	G	G	A	A	C	T	C	C	C	C	C	C	C	C	A	A	A	T	A	C	C	-	-	-	-	-	-	-	-	-	-	B4.seq									
839	G	G	A	T	C	A	G	G	A	N	G	A	A	C	T	C	C	C	C	C	C	A	A	A	N	A	C	C	C	T	T	T	T	T	T	T	A	A	G	N	G	B10.seq							
783	G	G	A	G	C	A	G	-	A	T	G	G	A	-	-	-	-	-	-	-	-	-	T	A	G	G	T	A	G	C	G	C	T	C							A2.seq								
783	G	G	A	G	C	A	G	-	A	T	G	G	A	-	-	-	-	-	-	-	-	-	T	A	G	G	T	A	G	C	G	C	T	C							B1.seq								
783	G	G	A	T	C	A	G	-	A	T	G	G	A	-	-	-	-	-	-	-	-	-	T	A	G	G	T	A	G	C	G	C	T	C							B11.seq								
	910	920	930	940	950																																												
	G	A	A	G	A	-	-	-	A	A	T	G	G	A	C	G	G	C	C	T	G	G	G	T	T	G	T	T	A	A	-	T	T	T	T	G	T	T	G	C	C	Majority							
874	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	T	G	C	C	T	C	T	T	A	A	A	T	C	T	T	T	T	G	T	G	C	C	B2.seq				
879	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	T	G	C	C	T	C	T	T	A	A	A	C	T	T	T	T	T	G	T	G	T	C	B4.seq				
889	G	A	T	A	G	C	C	C	C	C	G	T	N	T	C	T	G	C	A	T	N	T	G	G	A	T	G	C	C	T	T	A	A	A	T	N	T	T	T	T	T	T	T	T	T	B10.seq			
819	G	A	A	G	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A2.seq					
819	G	A	A	G	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B1.seq					
819	G	A	A	G	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B11.seq					
	960	970	980	990	1000																																												
	C	T	A	A	A	C	C	C	T	C	C	T	A	T	C	T	T	G	T	A	C	A	T	T	G	C	C	G	G	T	T	A	G	-	A	T	A	G	-	G	G	T	T	-	Majority				
898	G	T	A	A	A	C	C	A	T	T	G	C	T	A	G	T	G	T	C	C	T	C	T	A	A	A	T	T	G	A	C	A	T	A	G	C	A	T	A	G	A	G	T	T	T	T	T	B2.seq	
903	C	T	A	A	A	C	C	A	T	T	G	C	T	A	C	T	A	T	C	C	T	C	T	A	A	A	T	T	G	C	A	G	T	T	A	G	C	A	T	A	G	A	G	T	T	T	T	T	B4.seq
939	A	T	A	A	A	C	C	A	T	T	G	C	T	A	G	T	G	T	C	C	T	N	T	A	A	A	T	T	G	A	C	A	G	T	T	A	G	A	T	A	G	N	G	T	T	T	T	B10.seq	
858	C	T	-	-	A	C	C	C	T	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A2.seq		
858	C	T	G	A	A	C	C	C	T	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B1.seq		
858	C	T	T	A	A	C	C	C	T	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B11.seq		

Fig. 3(vi).



Decoration 'Decoration #1': Shade (with solid black) residues that differ from the Consensus.

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Fig.3A.

		Percent Similarity							
Percent Divergence		1	2	3	4	5	6		
	1		91.0	94.4	59.0	60.0	59.5	1	B2.seq
	2	4.5		89.2	58.8	59.9	59.6	2	B4.seq
	3	2.4	4.6		59.3	59.6	59.8	3	B10.seq
	4	32.6	32.3	34.3		95.5	95.7	4	A2.seq
	5	30.5	29.7	32.0	2.1		96.8	5	B1.seq
	6	31.6	30.9	32.6	2.4	2.7		6	B11.seq
		1	2	3	4	5	6		

Fig.4A.

		Percent Similarity					
Percent Divergence		1	2	3	4		
	1		88.7	81.7	85.0	1	Maizellb.pro
	2	10.8		82.2	82.6	2	B6.pro
	3	17.9	17.5		86.9	3	B11.pro
	4	14.6	17.0	12.7		4	Maizella.pro
		1	2	3	4		

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Fig.4.

```
1  MYDFMALDRPSTPTIDRGIALHKMIRLITM MaizeIIb.pro SEQ ID No: 30
1  MYDFMALNGPSTPTNIDRGIALHKMIRLITM B6.pro SEQ ID No: 7
1  MYDFMALDRPSTPTRIDRGIALHKMIRLVTM B11.pro SEQ ID No: 28
1  MYDFMALDRPSTPTRIDRGIALHKMIRLVTM MaizeIIa.pro SEQ ID No: 29

31  GLGGEGYLNFMGNEFGHP EWIDFP RGP QRL MaizeIIb.pro
31  GLGGEGYLNFMGNEFGHP EWIDFP RGP QVL B6.pro
31  GLGGEGYLNFMGNEFGHP EWIDFP RGP QTL B11.pro
31  GLGGEGYLNFMGNEFGHP EWIDFP RGP QSL MaizeIIa.pro

61  PSGKFIPGNNNSYDKCRRRFDLGDADYLR Y MaizeIIb.pro
61  PSGKFIPGNSNSYDKCRRRFDLGDADEFLR Y B6.pro
61  PTGKVLPGNNNSYDKCRRRFDLGDADFLR Y B11.pro
61  PNGSVI PGNNNSFDKCRRRFDLGDADYLR Y MaizeIIa.pro

91  HGMQEF DQAMQHLEEKYEFMTSDHQYISRK MaizeIIb.pro
91  HGMQQFDQAMQHLEEKYGFMTSDHQYVSRK B6.pro
91  RGMQEF DQAMQHLEEKYGFMTSDEHQYVSRK B11.pro
91  RGMQEF DQAMQHLEGKYEFMTSDHSYFSRK MaizeIIa.pro

121 HEEDKVI VFEKGD LVFVFN FHCNN SYFDYR MaizeIIb.pro
121 HEEDKVI VFEKGD LVFVFN FWSNN SYFDYR B6.pro
121 HEEDKVI IFERRGD LVFVFN FWSNN SFFDYR B11.pro
121 HEEDKVI IFERRGD LVFVFN FWSNN SYFDYR MaizeIIa.pro

151 IGC RKPGVYKVVLDS DAGLFGGFSRIHHA A MaizeIIb.pro
151 VGCLKPGKYKVVLDS DAGLFGGFSGRIHHTA B6.pro
151 VGCSKPGKYKVALDS DDALFGGFSRLDHDV B11.pro
151 VGCFKPGKYKIVLDS DDGLFGGFSRLDHDA MaizeIIa.pro

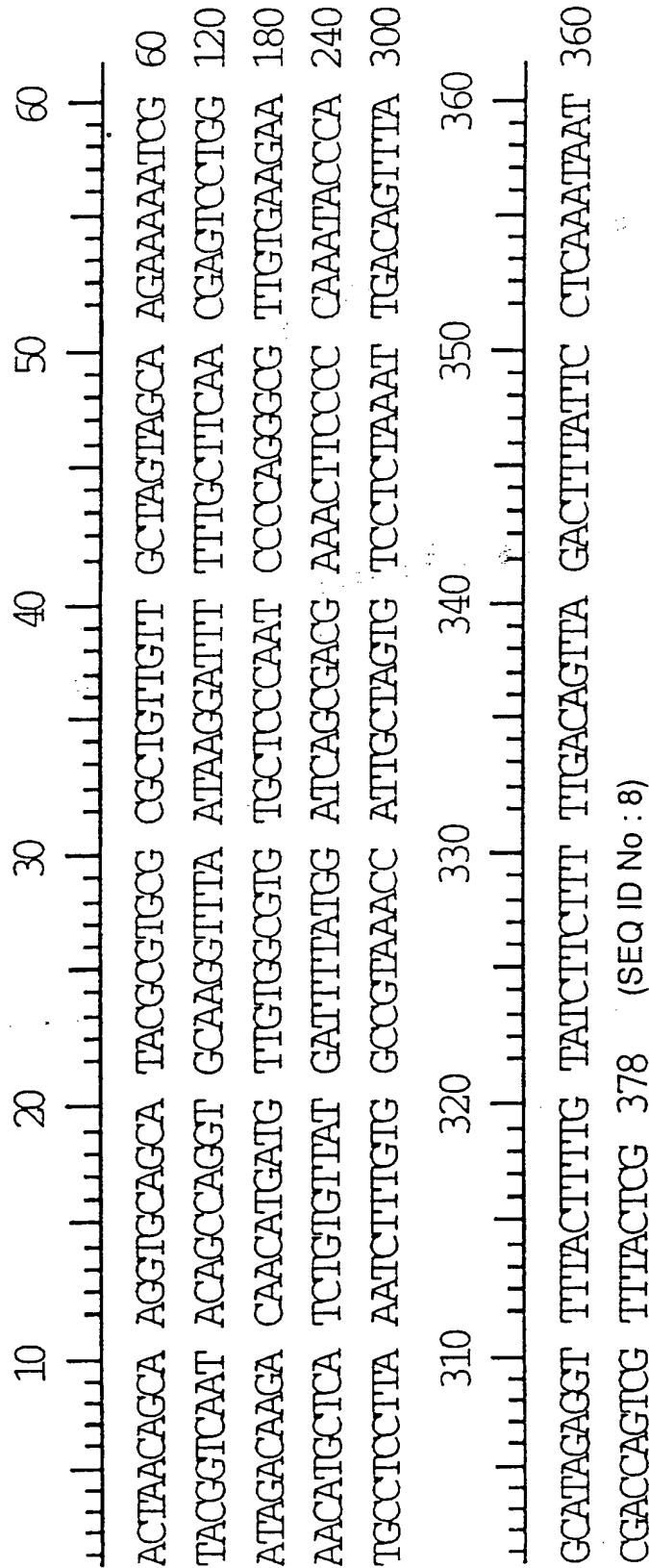
181 EHFTADC SHDNRPYSFSVYTPSRTC VVYAP MaizeIIb.pro
181 EHFTSDCQHDNRPHSFSVYTPSRTC VVYAP B6.pro
181 DYFTTEHPHDNRPRSFLVYTPSRTAVVYAL B11.pro
181 EYFTADWPHDNRPCSFSVYAPSRTAVVYAP MaizeIIa.pro

211 V---E. MaizeIIb.pro
211 M---N. B6.pro
211 T---E. B11.pro
211 AGAEDE MaizeIIa.pro
```

Decoration 'Decoration #1': Shade (with solid black) residues that differ from MaizeIIb.pro.



Fig.5.



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Fig.6.

10 20 30 40 50 60  
AACTAACAGC AAAGTGCAGC ATACCGGIGC GCGCTGTGTG TGTAGTAGC AAGAAAAATC 60  
GTATGGICAA TACAACCAGG TGCAAGGTTT AATAAGGATT TTIGCTTICAA CGAGTCTGG 120  
ATAGACAAAGA CAACATGATG TTIGTCTIGT TGTCTCCCAAT CCCAGGGXG TTIGIGAAGAA 180  
AACATGCTCA TCIGTGTAT TTTATGGATC AGGAXGAAA CCTCCCCCAA AXACCCCTTT 240  
TTTTTTTGAA AGXGGATAG GCCCCGGIX TCTGCATXIG GATGCCCTTCT TAAATXITIG 300  
310 320 330 340 350 360  
TAGCCATAAA CCATTGCTAG TGTCTXTTAA ATTGACAGTT TAGAATAGXG GTTGTACTTT 360  
TGTATTTTXXT TTTTGACAGT TAGACTIGTAT TCTCAATAA ATCGACATGT TGTTTACTCG 420  
AAGXTGAGAA ATAAAATCAG AGATTGXAG 449 (SEQ ID NO : 9)

Fig. 7.

10 20 30 40 50 60  
 ACTAACAGC AAAGTCAGC ATACGCATGC ACGCTGTGT TGCCTAGCACT AGCAAGAAA 60  
 AATCGTATGG TCAATACAAC CAGGTGCAAG GTTTAATAAG GGTHTTTGCT TCAACGAGTC 120  
 CTGGATAGAC AAGACAACAT GATCATGTC TCIGTGTCC CAAATTCCCA GGGCGTTGXG 180  
 XGGAAAACAT GCATCTCIGT GTTATCATTT TATGGATCAG XGXGGAACC TCCCCCAAAT 240  
 ACCCATGCGT CCTTAAACTT TTGTGGTCTT AAACCATGGC TACTATCTCT TAAATTGGCA 300  
 310 320 330 340 350 360  
 GTTTAGCATA GAGGTTTAC TTTTGTAAAT TTTTITIGAC AGTTAATAGA CTCTATTCTT 360  
 CAAATAATTG ACATGTCTCTT TACAAGAAGA TGAGAAATAA AATCAGGGAT TGAAGAATCC 420  
 CAAAAGCT 428 (SEQ ID No : 10)

Fig.8(i).	1	A A C T A A C A G C C A A A G T G C A G C A T A C G C G T G C	B10-3', .seq	SEQ ID No: 9
	1	A - C T A A C A G C C A A A G T G C A G C A T A C G C G T G C	B2-3', .seq	SEQ ID No: 8
	1	A C T A A A C A G C C A A A A G T G C A G C A T A C G C A T G C	B4-3', .seq	SEQ ID No: 10
	1	- - - - - T A G C G G G T A C - - - - -	ZMSBE2b-3', .seq	SEQ ID No: 31
	31	G C G C T G T T G C T A G - - - T A G C A A G A A A A	B10-3', .seq	
	30	G C G C T G T T G C T A G - - - T A G C A A G A A A A	B2-3', .seq	
	31	A C G C T G T T G C T A G C A C T A G C A A G A A A A	B4-3', .seq	
	12	- - - - - T C G T T G C T - G C G C - G G C A - - - - -	ZMSBE2b-3', .seq	
	58	A - T C G T A T G G T C A A T A C A A C C A G G T G C A A G	B10-3', .seq	
	57	A - T C G T A C G G T C A A T A C A G C C A G G T G C A A G	B2-3', .seq	
	61	A A T C G T A T G G T C A A T A C A A C C A G G T G C A A G	B4-3', .seq	
	28	- - - T G T G T G G - - - G G C T G T C - G A T G T G A G	ZMSBE2b-3', .seq	
	87	G T T A A T A A G G A T T T T - G C T T C A A C G A G T	B10-3', .seq	
	86	G T T A A T A A G G A T T T T T G C T T C A A C G A G T	B2-3', .seq	
	91	G T T A A T A A G G G T T T T - G C T T C A A C G A G T	B4-3', .seq	
	50	G - - - - A A A A C C T T C T - - - T C C A A - - A A C	ZMSBE2b-3', .seq	
	116	C C T G G A T A G A C A A G A C A A C A T G A T G T G T G	B10-3', .seq	
	116	C C T G G A T A G A C A A G A C A A C A T G A T G T G T G	B2-3', .seq	
	120	C C T G G A T A G A C A A G A C A A C A T G A T G T G T G	B4-3', .seq	
	70	C - - - G C A G A T G - - - - C A T G - - - C A T G	ZMSBE2b-3', .seq	
	146	C T G T G T G C T C C C A A - T C C C C C A G G G N G T G T	B10-3', .seq	
	146	G C G T G T G C T C C C A A - T C C C C C A G G G C G T T G T	B2-3', .seq	
	150	C T C T G T G C T C C C A A A T T C C C C A G G G C G T T G N	B4-3', .seq	
	87	C - - - A T G C T A C - - - A A T - - - - A A G G T - - - -	ZMSBE2b-3', .seq	
	175	G A G A A A A C A T G C T C A T C T G T G T T A T - - - T	B10-3', .seq	
	175	G A G A A A A C A T G C T C A T C T G T G T T A T G A T T	B2-3', .seq	
	180	G N G A A A A C A T G C T C A T C T G T G T T A T C A T T	B4-3', .seq	
	103	- - - - - T C T G - - - - T C T G - - - - A T - A C T	ZMSBE2b-3', .seq	
	202	T T A T G G A T C A G G G A N G A A A C C T C C C C C C A A A	B10-3', .seq	
	205	T T A T G G A T C A G C G A C G A A A C C T C C C C C C A A A	B2-3', .seq	
	210	T T A T G G A T C A G N G N G A A A C C T C C C C C C A A A	B4-3', .seq	
	112	T T A - - - A T C G - - - - -	ZMSBE2b-3', .seq	

[illegible]

Fig.8(iii).

409	G	T	T	T	T	A	C	T	C	G	A	A	G	N	T	G	A	G	A	A	T	A	A	T	C	B10-3'.seq
367	G	T	C	G	T	T	A	C	T	C	G														B2-3'.seq	
375	G	T	C	C	T	T	A	C	A	A	G	A	G	A	T	G	A	G	A	A	T	A	A	T	C	B4-3'.seq
209	-	-	C	G	C	T	T	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ZMSBE2b-3'.seq
439	A	G	A	G	A	T	T	G	N	A	G														B10-3'.seq	
378																									B2-3'.seq	
405	A	G	G	A	T	T	G	A	A	G	A	A	T	C	C	C	A	A	A	G	C	T				B4-3'.seq
216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ZMSBE2b-3'.seq

Decoration 'Decoration #1': Shade (with solid black) residues that differ from B10-3'.seq.

Fig.8A.

		Percent Divergence				Percent Similarity							
		1	2	3	4	1	2	3	4				
1			88.9	76.2	26.3	1							
2		4.1		81.2	31.8	2							
3		7.2	9.4		29.5	3							
4		33.5	32.6	33.9		4							
		1	2	3	4								

B10-3'.seq  
B2-3'.seq  
B4-3'.seq  
ZMSBE2b-3'.seq

Fig.9A.

Chinese Spring

N2AT2B  
N2BT2D  
N2DT2A

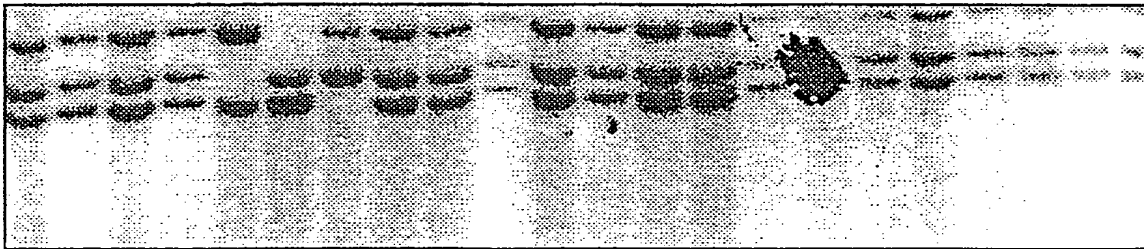


Fig.9B.

Chinese Spring

N2AT2B  
N2BT2D  
N2DT2A

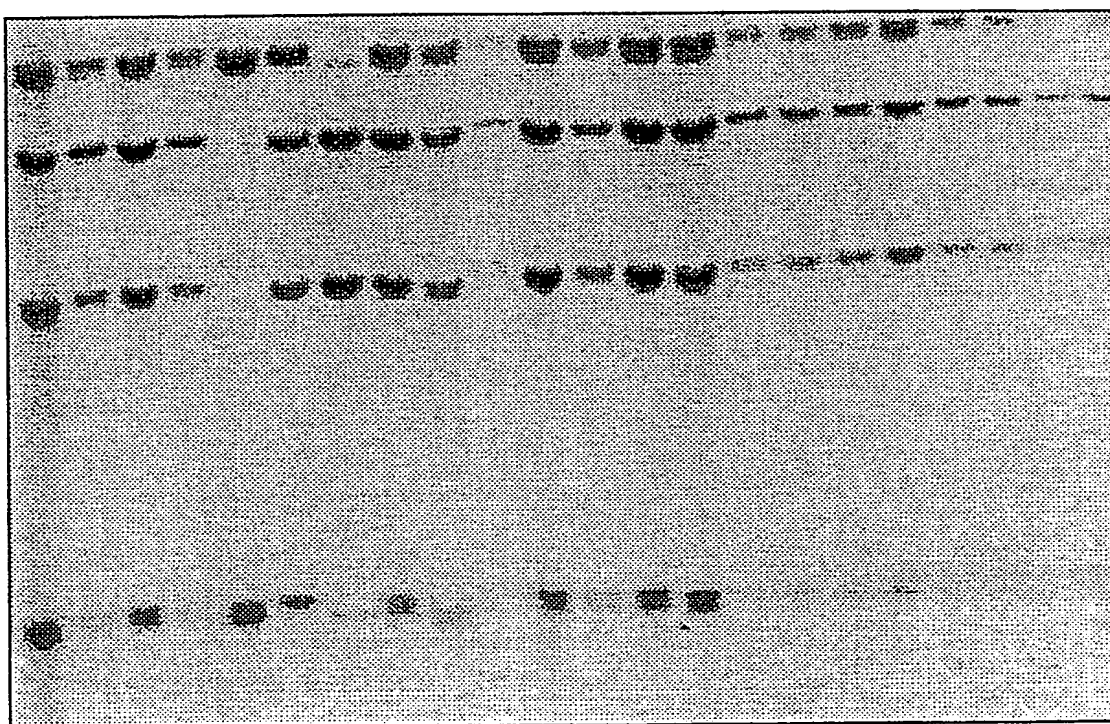




Fig. 10(i).

CATYGACGGCCAGTTCGAGCTCGGTACCCGGGGATCCGATTTGGTGTGGGAGATGTTCTTGCCAAACAATGCAGATGGTTCGCC 90 SEQ ID No: 1  
I D G O . L R A R Y P G I R F G V W E M F L P N N A D G S P SEQ ID No: 2  
ACCAATTCCTCACGGCTCACGGGTGAAGGTGAGATGGATACCTCCATCTGGGATAAAGGATTCATTCCTGCTGGATCAAGTACCTCCGT 180  
P I P H G S R V K V R M D T P S G I K D S I P A W I K Y S V  
GCAGACTCCAGGAGATATACCATAACAATGGAATATATATGATCCTCCGAGAGGAGAAGTATGTATCAAGCATCCTCAACCTAAACG 270  
Q T P G O I P Y N G I Y Y D P P E E E K Y V F K H P Q P K R  
ACCAAAATCATTTGGGATATATGAACACACATGTTGGCATGAGTAGCCCGGAACCAAGATCAACACATATGCAAACTTCAGGGATGAGGT 360  
P K S L R I Y E T H V G M S S P E P K I N T Y A N F R D E V  
GCITCCAAGAATTAAAAGACTTGGATACAATGCAGTGCAAATAATGGCAATCCAGSAGCACTCATCTATGGAAGCTTTGGGTACCAIGT 450  
L P R I K R L G Y N A V Q I M A I Q E H S Y Y G S F G Y H V  
TACCAATTTCTTGCACCAAGTAGCCGTTTGGGTCCCAGAGATTTAAATCTTTGATTGATAGAGCTCAGGAGCTTGGCTTGGTIGT 540  
T N F F A P S S R F G S P E D L K S L I D R A H E L G L V V  
CCTCATGGAITGTTTCACAGTCACGGTCAAAATAATACCTTGGACGGGTGGAATGTTTGGATGGCAGCGATACACATTACTTCCAIGG 630  
L H D V V H S H A S N N T L D G L N G F D G T D T H Y F H G  
CGGTTACGGGGCCATCACTGGATGTGGGATCCCGTGTGTTAACTATGGGAATAAGGAAGTTATAAGTTTCTACTTCCAATGCAAG 720  
G S R G H H W M W D S R V F N Y G N K E V I R F L L S N A R  
ATGGTGGCTAGAGGAGTAAAGTTTGATGTTCCGATTCGATGGCGGACCTCCATGATGTATACCCATCATGGATTACAAGTAACCTT 810  
W W L E E Y K F D G F R F D G A T S M M Y T H H G L O V T F

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Fig. 10(ii).

TACAGGAAGCTACCATGAATATTTGGCTTTGCCACTGATGATGCGGTCGTTTACTTGCTGATGAATGATCTAATTCATGGGT 900  
T G S Y H E Y F G F A T D V D A V V Y L M L M N D L I H G F  
TTATCCTGAAGCCGTAACTATCGGTGAAGATGTTAGTGAATGCCCTACATTTGCCCTTCCCTGTTCAAGTTGGTGGGTTGGTTTIGACTA 990  
Y P E A V T I G E D V S G M P T F A L P V Q V G G V G F D Y  
TCGCTTACATATGGCTGTGCCGACAAATGGATTGAACCTCTCAAGGAAACGATGAAGCTTGGGAGATGGGTAATATTGTGCACACACT 1080  
R L H M A V A D K W I E L L K G N D E A W E M G N I V H T L  
AACAAACAGAGGTGGCCGGAAGTGTGTTACTTATGCTGAAAGTCACGATCAAGCACCTGGTGGAGACAAGACTATTGCATTCIGGT 1170  
T N R R W P E K C V T Y A E S H D Q A L V G D K T I A F W L  
GATGGACAAGGATAIGTATGATTTCAIGGCCTCIGAACGGACCTTCGACACCCTAGTATTGATCGTGGAAATAGCACIGCATAAAAATGATTAG 1260  
M O K D M Y D F M A L N G P S T P S I D R G I A L H K M I R  
ACTTAICACAATGGGTTTAGGAGGAGAGGGTTAATCTTAACCTTATGGGAAATGAGTTCGGGCATCCCTGAATGGATAGACTTICCAAGAGG 1350  
L I T M G L G G E G Y L N F M G N E F G H P E W I D F P R G  
CCCACAAGTACTTCCAACCTGGTAAGTTCAATCCCGAGGAAACAACAACAGTTACGACAAAATGCCGTCGAAGATTGACCAGGGTGATGCAGA 1440  
P Q V L P T G K F I P G N N S Y D K C R R F D O G D A E  
AATTCCTTAGGTATCATGTCAGCAGATTGATCAGCGGATGCAGCATCTTGAGGAAAAAATATGGCTTTATGACATCAGACCACCAGTAA 1530  
F L R Y H G M Q O F D Q A M Q H L E E K Y G F M T S D H Q Y  
CGTATCTCGGAAACATGAGGAAGATAAGGTGATCGTGTGTTTGAAAAAGGGGACTTGGTATTGTGTTCAACTCCACTGGAGTAATAGCTA 1620  
V S R K H E E D K V I V F E K G D L V F V F N F H W S N S Y

Fig. 10(iii).

TTTCGACTACCGGTTGGCTGTTTAAAGCCTGGGAAGTACAAGTTGCTTAGACTCAGACGCCGACTCTTTGGTGGATTTGGTAGGAT 1710  
F D Y R V G C L K P G K Y K V V L D S D A G L F G G F G R I  
CCATCACACTGCAGAGCACCTTCACCTTCGACTGCCAACATGACAACAGGCCCCCATTCGTTCTCAGTGTACACTCCTAGCAGAACCTGTGT 1800  
H H T A E H F T S D C Q H D N R P H S F S V Y T P S R T C V  
TGCTATGCTCCAAATGAACATAACAGCAAGTGCAGCATACGACGCTGTTGTTGCTAGCACTAGCAAGAAAAATCGTATGGTCA 1890  
V Y A P M N . T A K C S I R M H A V A S T S K K S Y G Q  
ATACAACGAGGTGCAAGGTTTAATAAGGTTTGCTTCAACGAGTCTGGATAGACAAGACAACATGATGATGCTGCTGCTCCCAAAT 1980  
Y N Q V Q G L I R V C F N E S W I D K T T . C A L C S Q I  
TCCAGGGCGTTGTGGAGAAAAATGCTCATCTGTGTTATTTTATGGATCAGGGANGAAACCTCCCCCAAANACCCCTTTTTTTTTTGAA 2070  
P R A L W R K N A H L C Y F H D Q G ? N L P Q ? P L F F L K  
AGGNGATAGGCCCCGGTNTCTGCATNTGGATGCCCTCCTTAAATNTTGTAGCCATAAACCATTTGCTAGTGCTCCTCCTCCTCCTCCT 2160  
G G . A P G ? C ? W M P P . ? F V A I N H C . C P ? N . Q F  
TAGAATAGNGGTTNTACTTTTGTATTTNTTTTGTACAGTTAGACTGTATTCCTCAAATAATCGACATGTTGTTTACTCGAAGNTGAGAA 2250  
R I ? V ? L L Y F ? F D S . T V F L K . S T C C L L E ? E K  
ATAAAATCAGAGATTGNAGNAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2307  
N Q R L ? ? K K K K K K K K K K N

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Fig.11(i).

M L C L - - - - - S X S L L P R P - - - - - S R A Majority SEQ ID No:54									
10	20	30	40	50					
52	M L C L - - - - -	S S S L L P R P - - - - -	- - - - -	- - - - -	S - A	TASBE1D2	SEQ ID No:32		
16	M L C L T - - - - -	A P S C S P S L P R P - - - - -	- - - - -	- - - - -	S R P	TASBEI	SEQ ID No:33		
44	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	OsbeII-1ALL	SEQ ID No:11		
151	M A T F A V S G W T L G V A R P A G A G G L L P R S G S E R R G G V D L P S L L R K K D S	S R A	Wheat SBEII-2	SEQ ID No:34					
A A D R P X - P G I - - - X G G G X X R L S A V P A - P X X L R - - - - - W X W P R K Majority									
60	70	80	90	100					
94	A A D R P L - P G I I A G G G G K R L S V V P S V P F L L R - - - - -	W L W P R K	TASBE1D2						
76	A A D R P G - P G I - - S G G G N V R L S A V P A - P S S L R - - - - -	W S W P R K	TASBEI						
44	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	OsbeII-1ALL			
301	V L S R A A S P G K V L V P D G E S D L A S P A Q P E E L Q I P E D I E E Q T A E V N M T G G T A	Wheat SBEII-2							
A K S K S S V P V X A X X X X I X A T X X X G V X X L P - - - - - I Y D L D P Majority									
110	120	130	140	150					
202	A K S K S F V S V T A R G N K I A A T T G Y G S D H L P - - - - -	I Y D L D L	TASBE1D2						
175	A K S K F S V P V S A P R D Y T M A T A E D G V G D L P - - - - -	I Y D L D P	TASBEI						
44	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	OsbeII-1ALL			
451	E K L E S S E P T Q G I V E T I T D G V T K G V K E L V V G E K P R V V P K P G D G G Q K I Y E I D P	Wheat SBEII-2							
K L A X F K X H F D Y R X X X X X Q K H X I E K H E G G L E E F S K G Y L K F G I N T E X X A X V Majority									
160	170	180	190	200					
304	K L A E F K D H F D Y T R N R Y I E Q K H L I E K H E G S L E E F S K G Y L K F G I N T E H G A S V	TASBE1D2							
277	K F A G F K E H F S Y R M K K Y L D Q K H S I E K H E G G L E E F S K G Y L K F G I N T E N D A T V	TASBEI							
44	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	OsbeII-1ALL			
601	T L K D F R S H L D Y R Y S E V R R R I R A A I D Q H E G G L E A F S R G Y E K L G F T R S A E G I T	Wheat SBEII-2							
Y R E W A P A A X X A Q L V G D F N N W N G S G H X M T K D N F G V W S I R L S N N A D G S P A I P Majority									
210	220	230	240	250					
454	Y R E W A P A A E E A Q L V G D F N N W N G S G H K K M A K D N F G V W S I R I S H - V N G K P A I P	TASBE1D2							
427	Y R E W A P A A M D A Q L I G D F N N W N G S G H R M T K D N Y G V W S I R I S H - V N G K P A I P	TASBEI							
44	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	OsbeII-1ALL			
751	Y R E W A P G A H S A A L V G D F N N W N P N A D T M T R D D Y G V W E I F L P N N A D G S P A I P	Wheat SBEII-2							

Fig.11(ii).

601	H	G	S	K	V	K	F	R	F	O	T	P	S	G	V	W	V	D	S	I	P	A	W	I	K	Y	A	V	Q	T	A	G	E	I	G	A	P	Y	D	G	I	H	Y	D	P	P	S	E	E	K	Majority
574	H	N	S	K	V	K	F	R	F	H	R	G	D	G	L	W	V	D	R	V	P	A	W	I	R	Y	A	T	F	D	A	S	K	F	G	A	P	Y	D	G	V	H	W	D	P	P	S	G	E	R	TASBE1D2
101	H	G	S	R	V	K	V	R	M	D	T	P	S	G	I	-	K	D	S	I	P	A	W	I	K	Y	S	V	Q	T	P	G	D	I	-	-	P	Y	N	G	I	Y	Y	D	P	P	E	E	E	K	OsbeII-1ALL
901	H	G	S	R	V	K	I	R	M	D	T	P	S	G	V	-	K	D	S	I	S	A	W	I	K	F	S	V	Q	A	P	G	E	I	-	-	P	F	N	G	I	Y	Y	D	P	P	E	E	E	K	Wheat SBEII-2
	Y	V	F	K	H	P	Q	P	K	P	D	S	L	R	I	Y	E	A	H	V	G	M	S	G	P	E	P	E	I	N	T	Y	A	E	F	R	D	E	V	L	P	R	I	K	A	L	G	Y	N	Majority	
748	Y	V	F	N	H	P	R	P	P	K	P	D	V	P	R	I	Y	E	A	H	V	G	V	S	G	K	L	E	A	G	T	Y	R	E	F	P	D	N	V	L	P	C	L	R	A	T	N	Y	N	TASBE1D2	
724	Y	V	F	K	H	P	R	P	R	K	P	D	A	P	R	I	Y	E	A	H	V	G	M	S	G	E	K	P	E	V	S	T	Y	R	E	F	A	D	N	V	L	P	R	I	K	A	N	Y	N	TASBEI	
242	Y	V	F	K	H	P	Q	P	K	R	P	K	S	L	R	I	Y	E	T	H	V	G	M	S	S	P	E	P	K	I	N	T	Y	A	N	F	R	D	E	V	L	P	R	I	K	R	L	G	Y	N	OsbeII-1ALL
1042	Y	V	F	Q	H	P	Q	P	K	R	P	E	S	L	R	I	Y	E	S	H	I	G	M	S	S	P	E	P	K	I	N	S	Y	A	N	F	R	D	E	V	L	P	R	I	K	R	L	G	Y	N	Wheat SBEII-2
	A	V	Q	L	M	A	I	Q	E	H	S	Y	A	S	F	G	Y	H	V	T	N	F	F	A	V	S	S	R	S	G	T	P	E	D	L	K	S	L	I	D	K	A	H	S	L	G	L	R	V	Majority	
898	T	V	Q	L	M	G	I	M	E	H	S	D	S	A	S	F	G	Y	H	V	T	N	F	F	A	V	S	S	R	S	G	T	P	E	D	L	K	Y	L	I	D	K	A	H	S	L	G	L	R	V	TASBE1D2
874	T	V	Q	L	M	A	I	M	E	H	S	Y	A	S	F	G	Y	H	V	T	N	F	F	A	V	S	S	R	S	G	T	P	E	D	L	K	Y	L	V	D	K	A	H	S	L	G	L	R	V	TASBEI	
392	A	V	Q	I	M	A	I	Q	E	H	S	Y	G	S	F	G	Y	H	V	T	N	F	F	A	P	S	S	R	F	G	S	P	E	D	L	K	S	L	I	D	R	A	H	E	L	G	L	V	OsbeII-1ALL		
1192	A	V	Q	I	M	A	I	Q	E	H	S	Y	A	S	F	G	Y	H	V	T	N	F	F	A	P	S	S	R	F	G	T	P	E	D	L	K	S	L	I	D	R	A	H	E	L	G	L	I	V	Wheat SBEII-2	
	L	M	D	V	V	H	S	H	A	S	N	N	T	L	D	G	L	N	G	F	D	V	G	Q	G	T	D	T	S	Y	F	H	G	X	R	G	H	H	K	M	W	D	S	R	L	F	N	Y	G	Majority	
1048	L	M	D	V	V	H	S	H	A	S	N	N	V	I	D	G	L	N	G	Y	D	V	G	Q	S	A	H	E	S	Y	F	Y	T	G	D	K	G	Y	N	K	M	W	N	G	R	M	F	N	Y	A	TASBE1D2
1024	L	M	D	V	V	H	S	H	A	S	N	K	T	D	G	L	N	G	Y	D	V	G	Q	N	T	Q	E	S	Y	F	H	T	G	E	R	G	Y	H	K	L	W	D	S	R	L	F	N	Y	A	TASBEI	
542	L	M	D	V	V	H	S	H	A	S	N	N	T	L	D	G	L	N	G	F	D	-	-	-	G	T	D	T	H	Y	F	H	G	G	S	R	G	H	H	W	M	W	D	S	R	V	F	N	Y	G	OsbeII-1ALL
1342	L	M	D	I	V	H	S	H	S	N	N	T	L	D	G	L	N	G	F	D	-	-	-	G	T	D	T	H	Y	F	H	G	G	P	R	G	H	H	W	M	W	D	S	R	L	F	N	Y	G	Wheat SBEII-2	
	N	W	E	V	L	R	F	L	L	S	N	A	R	Y	W	L	D	E	F	K	F	D	G	F	R	F	D	G	V	T	S	M	L	Y	T	H	H	G	L	N	M	S	F	T	G	S	Y	K	E	Y	Majority
1198	N	W	E	V	L	R	F	L	L	S	N	L	R	Y	W	M	D	E	F	M	F	D	G	F	R	F	V	G	V	T	S	M	L	Y	N	H	N	G	I	N	M	S	F	N	G	N	Y	K	D	Y	TASBE1D2
1174	N	W	E	V	L	R	F	L	L	S	N	L	R	Y	W	M	D	E	F	M	F	D	G	F	R	F	D	G	V	T	S	M	L	Y	N	H	H	G	I	N	M	S	F	A	G	S	Y	K	E	Y	TASBEI
683	N	K	E	V	I	R	F	L	L	S	N	A	R	W	L	E	E	Y	K	F	D	G	F	R	F	D	G	A	T	S	M	M	Y	T	H	H	G	L	Q	V	T	F	T	G	S	Y	H	E	Y	OsbeII-1ALL	
1483	S	W	E	V	L	R	F	L	L	S	N	A	R	W	L	E	E	Y	K	F	D	G	F	R	F	D	G	V	T	S	M	M	Y	T	H	H	G	L	Q	M	T	F	T	G	N	Y	G	E	Y	Wheat SBEII-2	

Fig. 11 (iii).

FGLATDVDAVVYLMLANDLIHG LXP EAVVVGEDVS GMPVL CX PVDEGGVG Majority  
 510 520 530 540 550  
 IGLDIN VDAFVYMMLANHLMHKLFPEAIVVAVDVSGMPVLCWPVDEGGLGTASBEIDZ  
 11348  
 FGLDTDVDVAVVYLMMLANHLMHKLLPEATVVAEDVSGMPVLCRSVDEGGVGTASBEI  
 11324  
 FGFA TDVDVAVVYLMMLMNDLIHGFYPEAVTIGEDVSGMPTTFALPVQVGGVGOsbeII-1ALL  
 8833  
 FGFA TDVDVAVVYLMMLVNDLIHGLHPDAVSIIGEDVSGMPTTCIPVPDGGVGVWheat SBEII-2  
 1633  
 FYRLAMAVADKWIDL LKKKDD-XWSMGXIV-HTLTNRRYP EKCVAYES Majority  
 560 570 580 590 600  
 FDYRQ AMTI PD RRI DYLE NKGDQQWSMS SVISQTL TNRRYP EKFIAYAER TASBEIDZ  
 1498  
 FDYRL AMAI PD RRI DYLE NKDD LEWSMSG-I AHTLTNRRYT EKCIAYAES TASBEI  
 1474  
 FDYRL HMAVADKWI EL LKGN DE-AWE MGN IV-H TLTNRRRW PEKCVTYAES OsbeII-1ALL  
 983  
 LDYRL HMAVADKWI EL LKQS DE-SWKMGDIV-H TLTNRRRW LEKCVTYAES Wheat SBEII-2  
 1783  
 HQALVGD KTI AF LLMDKDM YDGMALXXPSSPT IDRGIAL QKM IH LITMG Majority  
 610 620 630 640 650  
 QNH SI IGSKT MA FL LMEWETYS GMSAMD PDSPT IDR AI ALQ KM IH FI TMA TASBEIDZ  
 1648  
 HDQ SI VGDKT MA FL LMDKEM YTGMS DLQPASPT IDR GI ALQ KM IH FI TMA TASBEI  
 1621  
 HDQALVGD KTI AFWLMDKDM YDFMALNG PSTPS IDR GI ALHKMI RLITMG OsbeII-1ALL  
 1127  
 HDQALVGD KTI AFWLMDKDM YDFMALDRPSTPR IDR GI ALHKMI RLITMG Wheat SBEII-2  
 1927  
 LGDGGYL NFMGNEFGHP EWIDFP RPQL-LPT GK--PGNNNSYDKCRRRFD Majority  
 660 670 680 690 700  
 FGGDSYLKF MGNE-----GNNWSYDKCRRRQWS TASBEIDZ  
 1798  
 LGGDGYL NFMGNEFGHP EWIDFP RE-----PGNNNSYDKCRRRQWS TASBEI  
 1771  
 LGGEGYL NFMGNEFGHP EWIDFP RPQVLPTGKF IPGNNNSYDKCRRRFD OsbeII-1ALL  
 1277  
 LGGEGYL NFMGNEFGHP EWIDFP RPQVTLPTGKVLP GNNNSYDKCRRRFD Wheat SBEII-2  
 2077  
 LGDADF LRYHG MNAFDQA MQHLEDKY GF LSSSHQYVSRKN EEDKVIVFEK Majority  
 710 720 730 740 750  
 --- -- -- --YMN AFVQA VDT PS DKCSFLSSSNQTASHMNEEEKGSA LTK TASBEIDZ  
 1837  
 LAIDIHL RYKY MNAFDQA MNALDDKFSFLSSSKQIVSDMNEEKKIIVFER TASBEI  
 1888  
 QGDAEF LRYHGMQQFFDQA MQHLEEEKYGFTMTSDHQYVSRKHEEDKVIVFEK OsbeII-1ALL  
 1427  
 LGDADF LRYHGMQE FFDA MQHLEEEKYGFTMTSEHOYVSRKHEEDKVIIFER Wheat SBEII-2  
 2227

Fig. 11(iv).

1).

	GDLVFVFNFWNSNSYFDYRVGCGXXPKYKVALDSDAXLFGGFGRRXXHXDXD	Majority						
	760	770	780	790	800			
1957	G	YTHLRSGC			TASBE1D2			
2038	GDLVFVFNFHPSKT	YDGKVC	DLPGKYKVALDSDA	LMFGGHRVAHDND	TASBEI			
1577	GDLVFVFNFHWSNSYFDYRVGCG	DLPGKYKVALDSDA	LMFGGHRVAHDND	OsbeII-1ALL				
2377	GDLVFVFNFHWSNSYFDYRVGCG	DLPGKYKVALDSDA	LMFGGHRVAHDND	Wheat SBEII-2				
	HFTS	EXXHDNRPPXSFSVLTPSRTCVCVVY	A	P	EXXA			
	810	820	830	840	850			
1984	FDP		LPSTSSCA		TASBE1D2			
2188	HFTS	ETNFNRRPN	SFKIL	SPSRTICVAY	YRVEEK	AEKPKDEGA	TASBEI	
1727	HFTS	DCQHDNRPH	SFSVY	TPSRTICVVY	PMN	PT	OsbeII-1ALL	
2527	YFTT	EHPHDNRPR	SFSVY	TPSRTICVVY	ALTE	EPA	Wheat SBEII-2	
	AX	V	T	K	XXXXXXLXRXGXG	XXXXX	XX	Majority
	860	870	880	890	900			
2020	ASWGKTALGYIO	VEATGVK	DAADGEATSGSEKASTG	DS	SKKGINFV	TASBEI		
2338	AKCSI	RRMHAVVAS	TSKKS	YGQY	QNVQGL	IRVCFNESWIDKT	OsbeII-1ALL	
1826	AA						Wheat SBEII-2	
2632	FLXPXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	Majority	
	910	920	930	940	950			
2020	FLGP	SNQSPFSK	PF	IGFPGC	IFCCG	L	TASBE1D2	
2479	FLSPDKDNK	APYQR	IRTVCRRP	PCNT	PAIAS	SSNTVKLC	TASBEI	
1964	ALCSQIPRALWRKNAHL	CYFMDQGRNLPQKPLF	FL	MPG	GA	DGV	OsbeII-1ALL	
2710	CSKRH						Wheat SBEII-2	
	X	XXXXKXX	XXAVXX	XXXXXX	XXXXIL	XXXXII	Majority	
	960	970	980	990	1000			
2098	FKGE	MI	Y	Y	Y	Y	TASBE1D2	
2626	LRLPT	I	DK	AV	MVRVES	SYMCQICAI	TASBEI	
2093	C	I	WMP	P	IFV	AINH	OsbeII-1ALL	
2782	ACW	ALER	K	WTGL	GV	CRALP	Wheat SBEII-2	

Fig. 11(v).

	1010	1020	1030	1040	Majority
2170	- - - - -	- - - - -	- - - - -	- - - - -	TASBE1D2
2764	L S V C K K K K R H E D E D A L	T M L E Y G G N - - G - - A - -	- - - - -	- - - - -	TASBEI
2204	- - - - - T V F L K . S - T C C L	- - - - - E D E K . N Q R L K K K K K K	- - - - -	- - - - -	OsbeII-1ALL
2905	- - - - - L H - - - V N I - - - - -	- - - - - I F . . . V I P .	- - - - -	- - - - -	Wheat SBEII-2

Decoration 'Decoration #1': Shade (with solid black) residues that match the Consensus exactly.



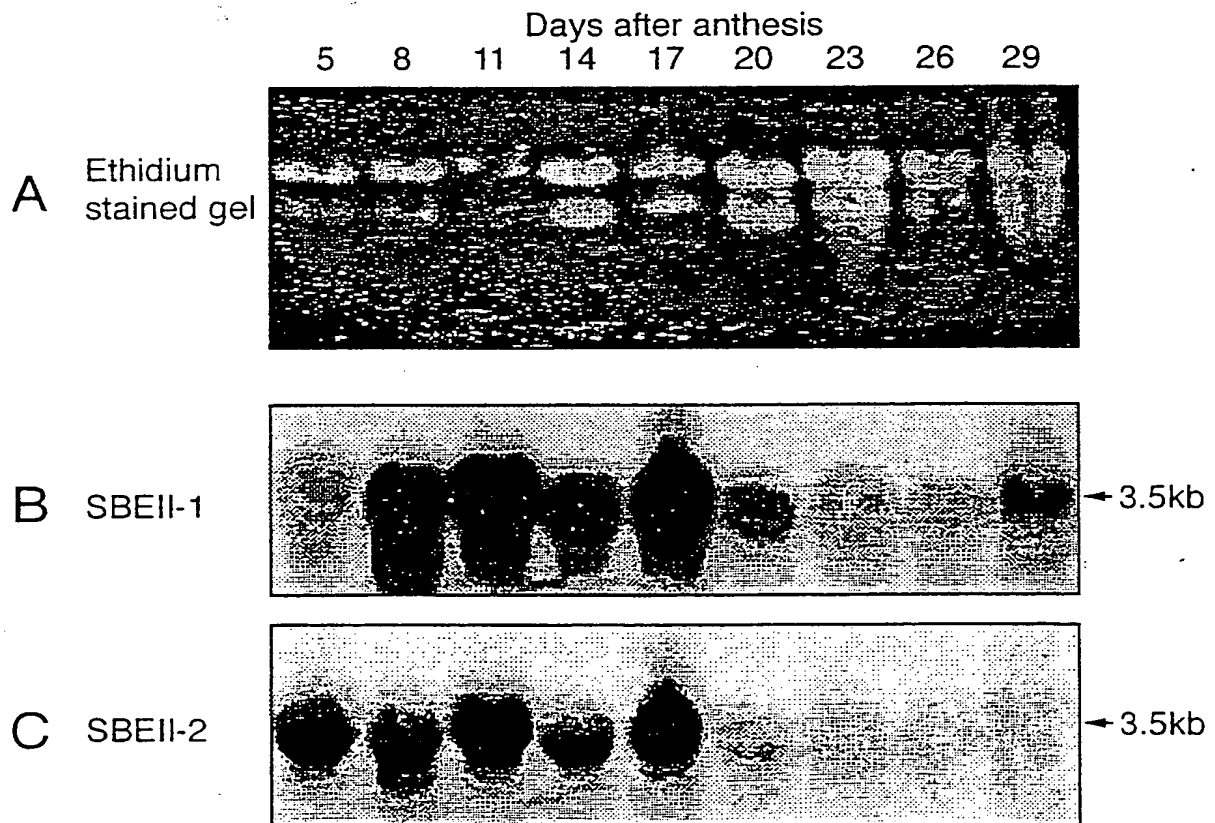
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Fig.11A.

Percent Similarity						
Percent Divergence		1	2	3	4	
	1		63.9	31.2	37.0	1
	2	39.1		46.7	41.8	2
	3	86.9	73.8		69.6	3
	4	94.5	76.4	25.3		4
		1	2	3	4	

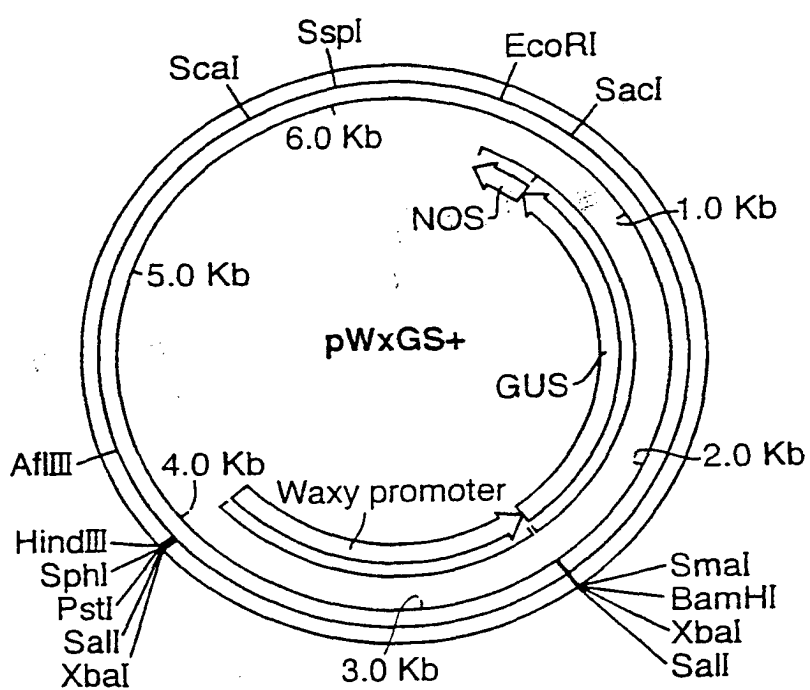
TASBE1D2  
TASBEI  
sbell-1ALL  
Wheat SBEII-2

Fig.12.



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Fig.13.



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SUBSTITUTE SHEET (RULE 26)

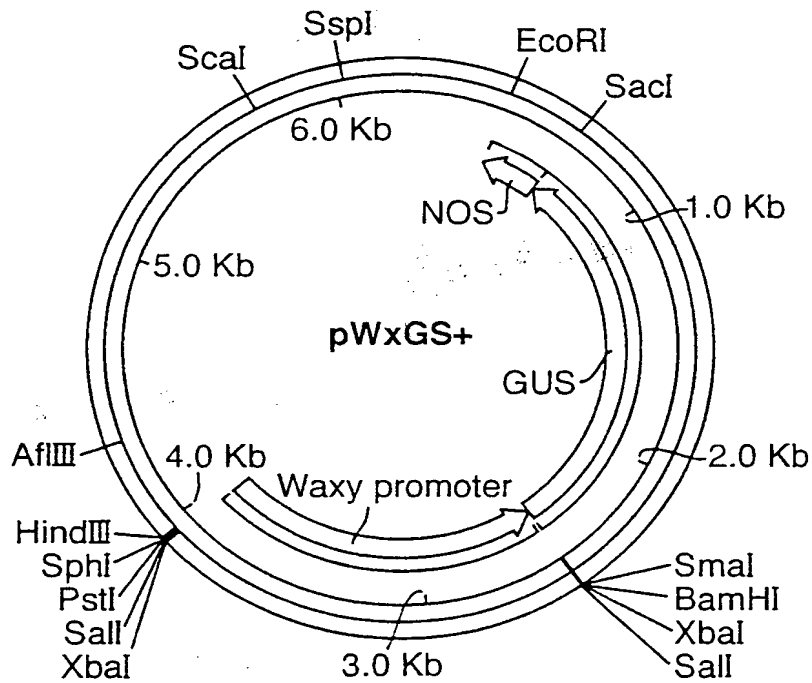
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Fig.13A(Cont).

1060 1070 1080 1090 1100 1110 1120  
CGGGGACGCTTCCAAACGGGGCCACGTACGCCGCGTGTGCGTGCGTGACGACGACAAAGCCAAGG 1120  
CGAGGCAGCCCCCGATCGGGAAAGCGTTTGGGCGCGAGCGCTGGCGTGCGGTGCGTGGTGCGCA 1190  
GTGCCCCGGGGAACGGGTATCGTGGGGGCGCGGAGAGAGCGTGGCGAGGCCGAGAGCAGCGCGG 1260  
GCCGGGTACGCAACGCGCCCCACGTACTGCCCTCCCCCTCCGCGCTAGAAATACCGAGGCCCTGGA 1330  
CCGGGGGCCCCCGTCACATCCATCGACCCGATCGATCGCCACAGCCCAACACACCCCGCGAGGCG 1400  
1410 1420 1430 1440 1450 1460 1470  
ACGCGACAGCCGCGCAGGAGGAAGGAATAAACTCACTGCCAGCCAGTGAAGGGGAGAGTGTACTGCTCC 1470  
GTCGACTCTAGAGGATCC 1488 (SEQ ID NO:55)

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Fig.13.



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Fig.14.

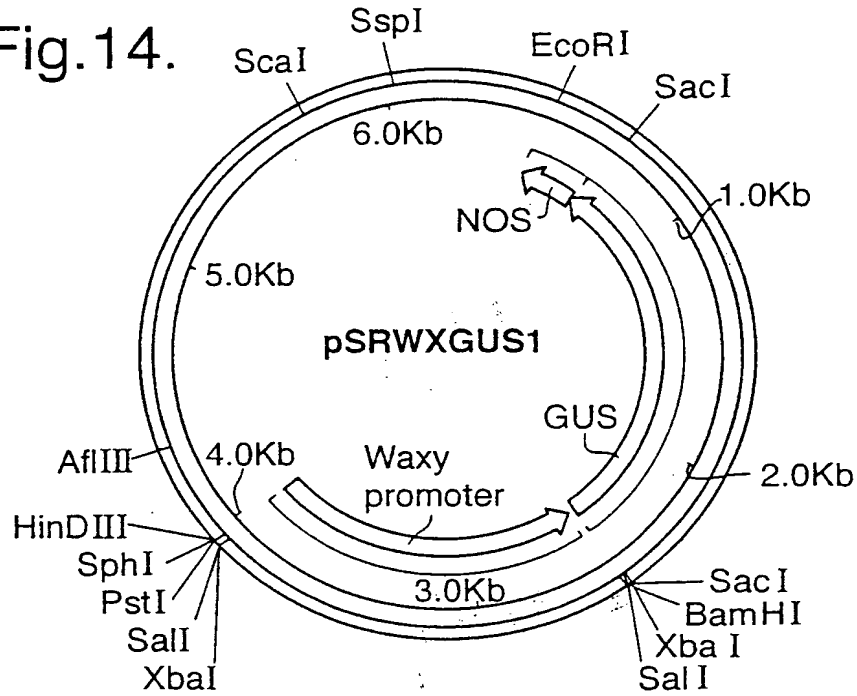


Fig.15.

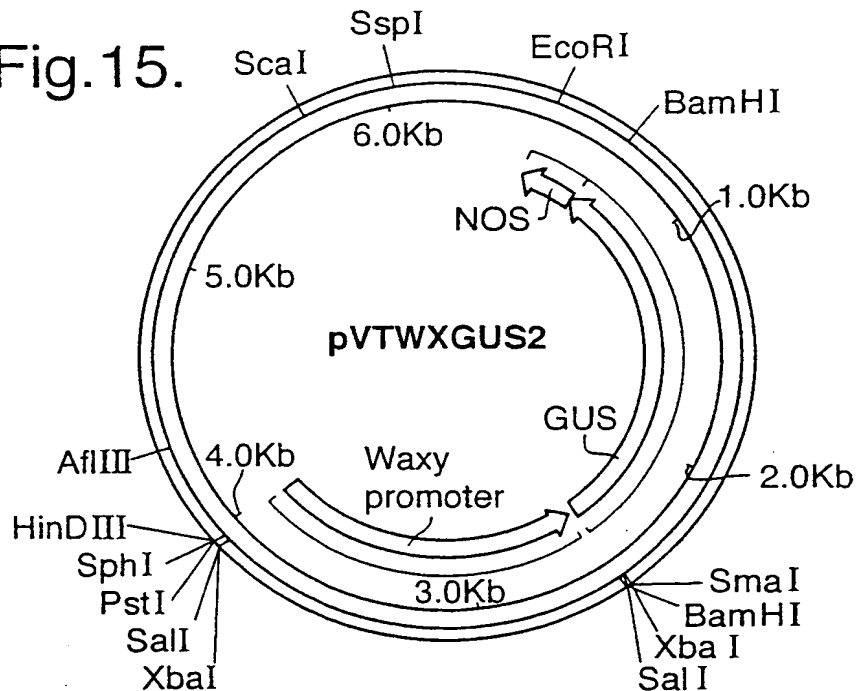


Fig.16.

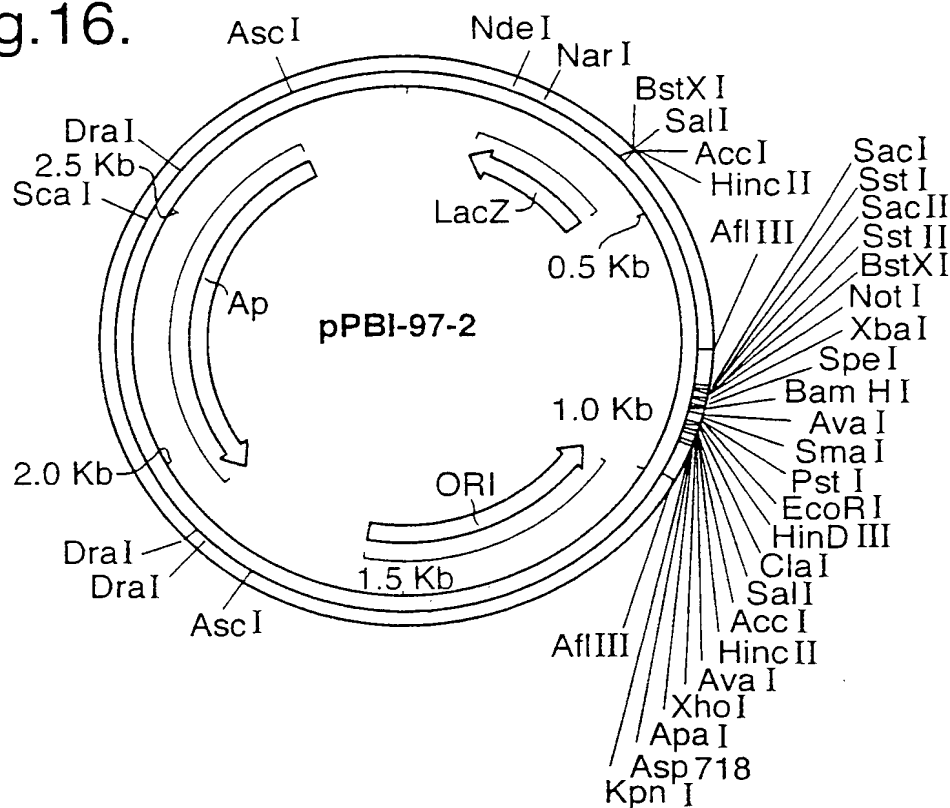


Fig.17.

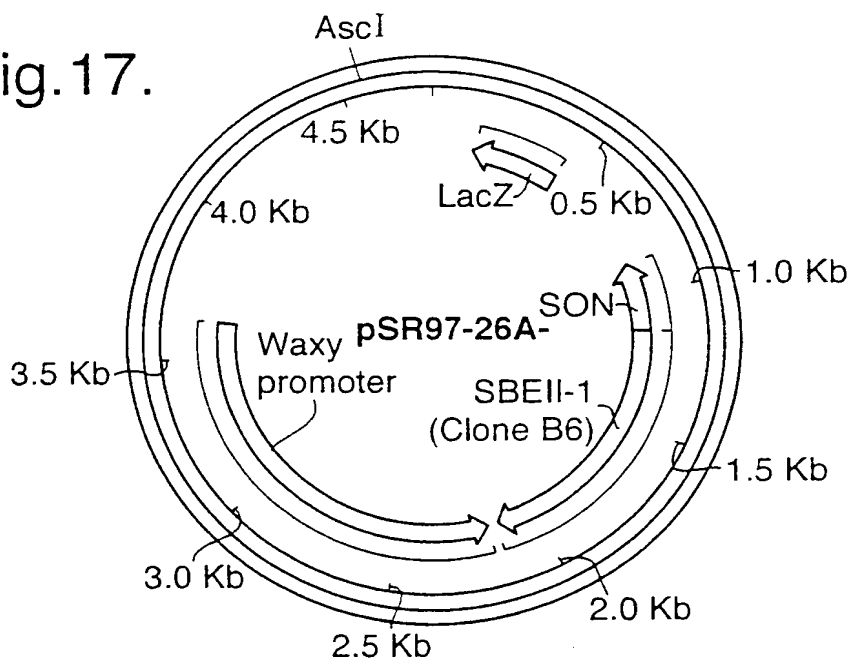


Fig.18.

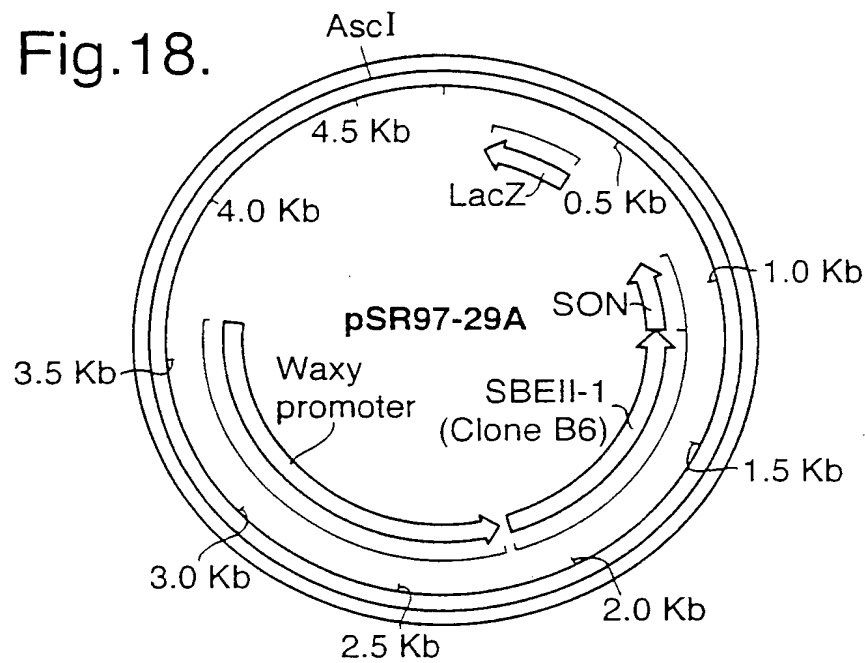
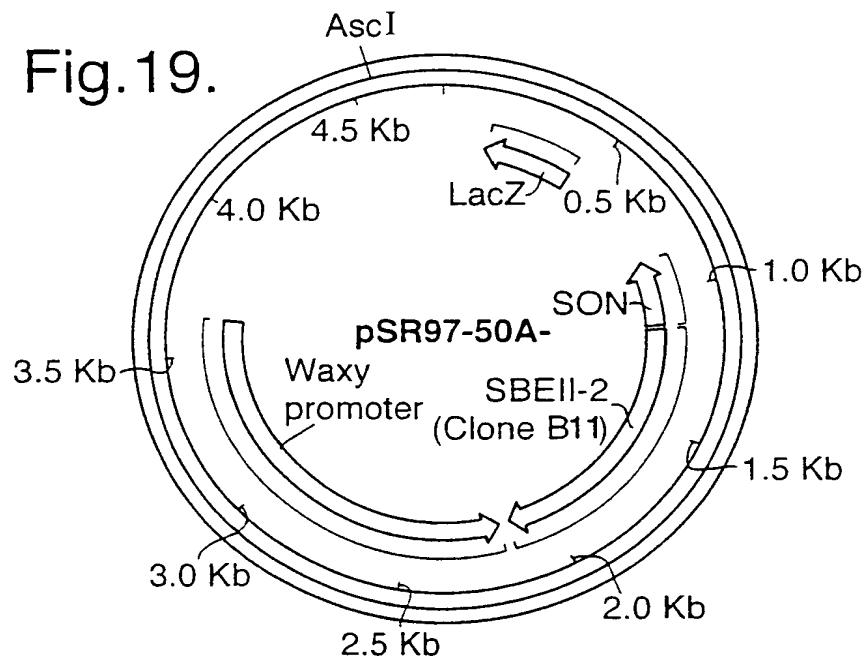


Fig.19.





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Fig.20.

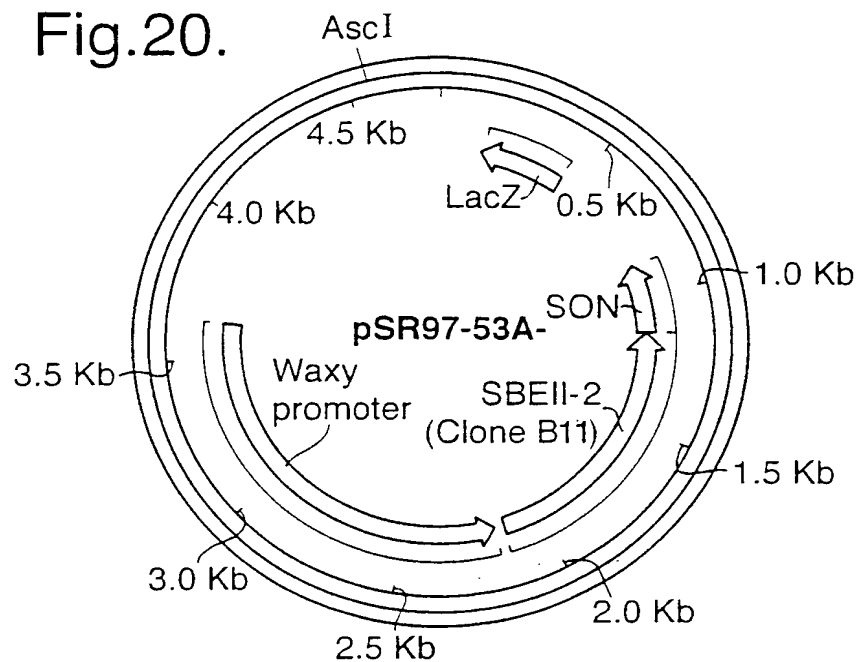


Fig.21.

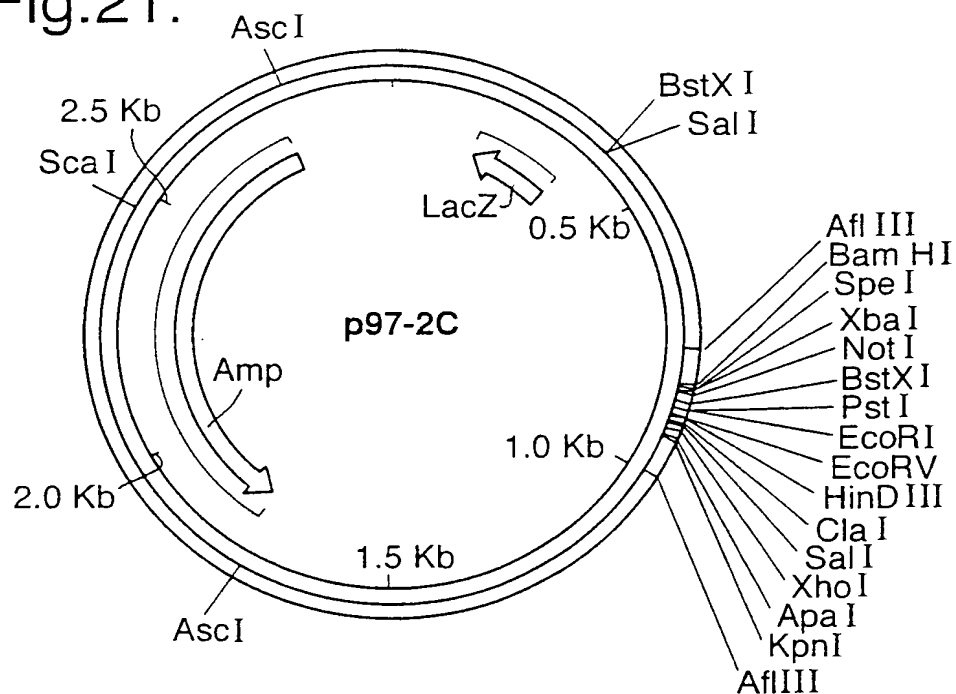


Fig.22.

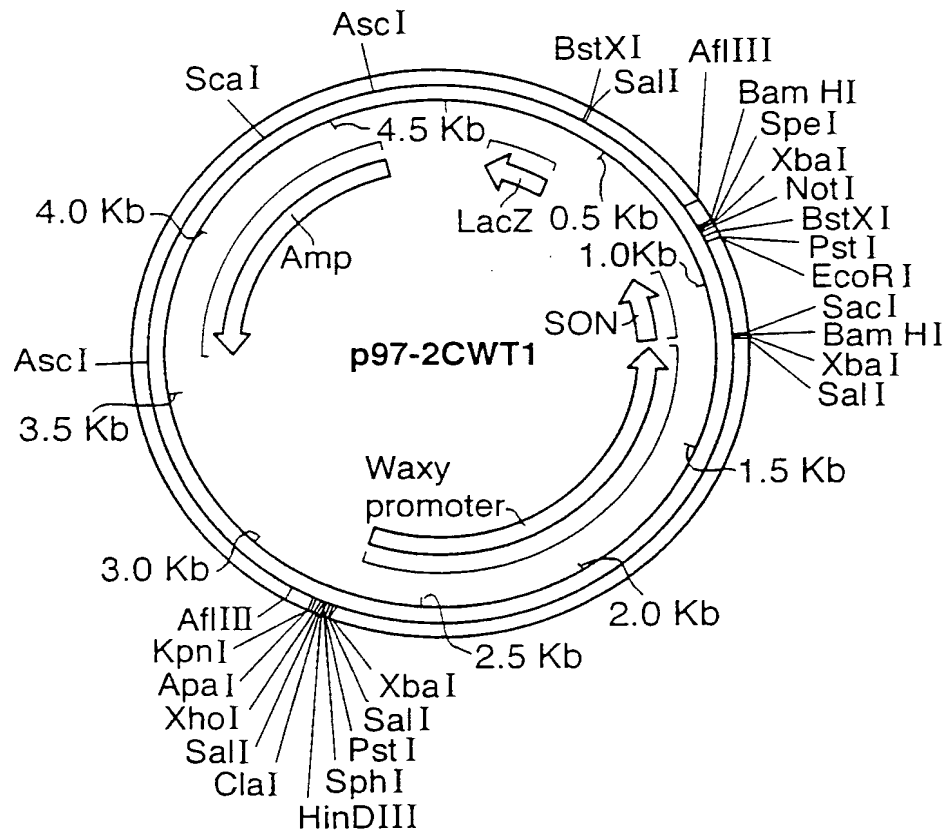


Fig.23.

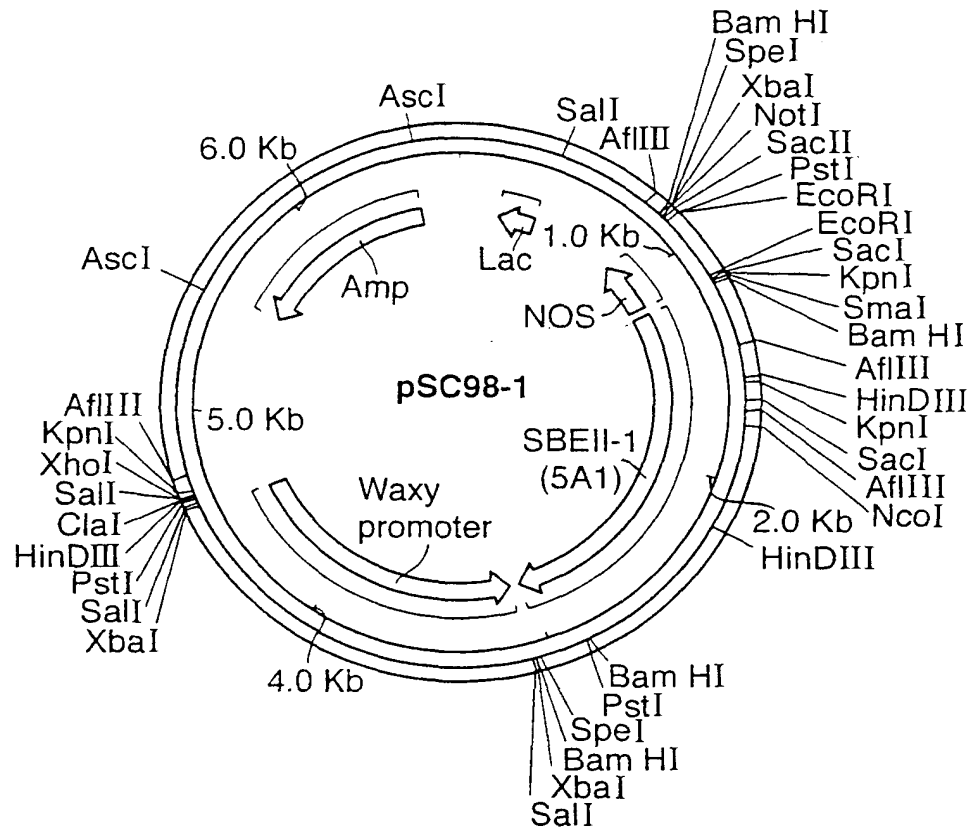


Fig.24.

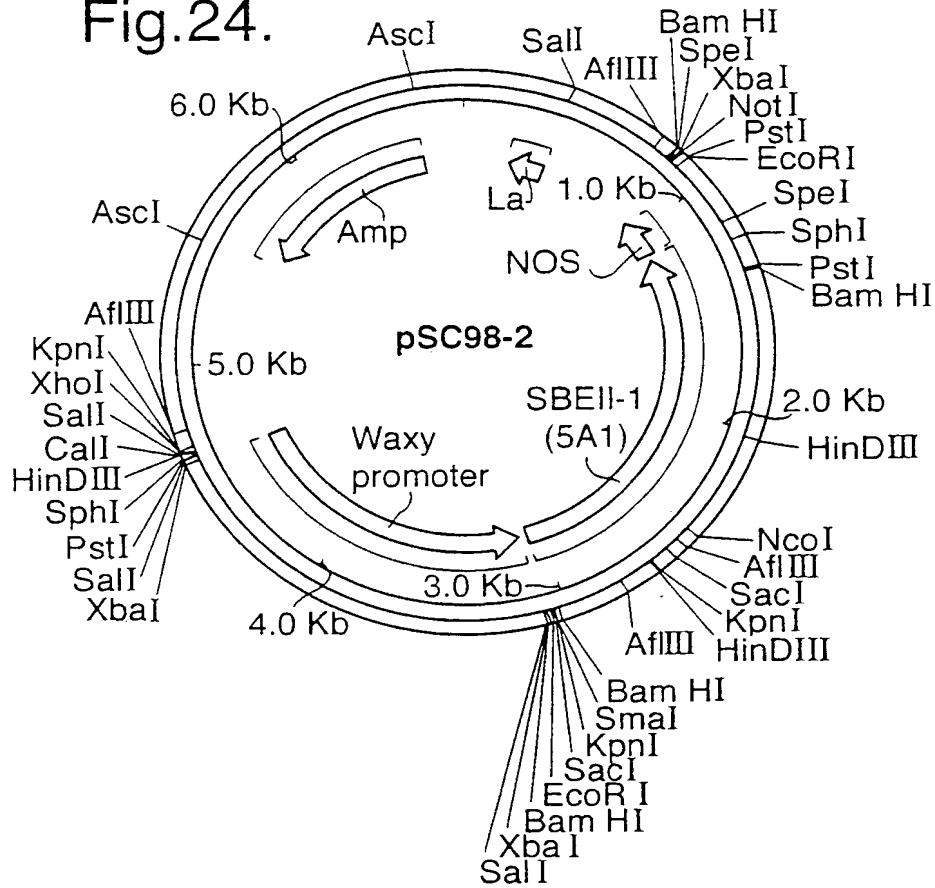


Fig.25.

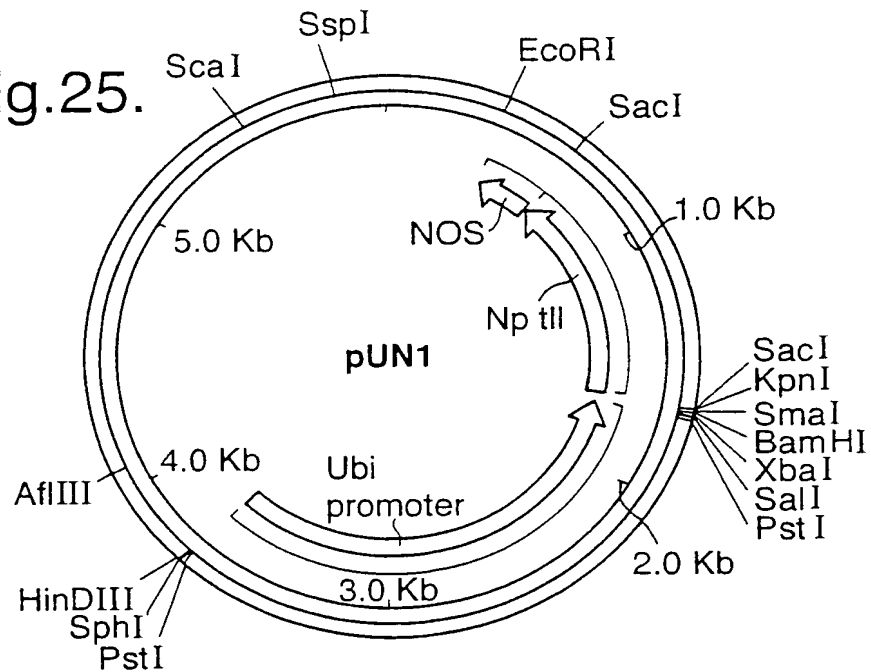


Fig.26.

10 20 30 40 50 60  
GAGCTCCGTT TCGCATGATT GAACAAGATG GATTGCACGC AGGTTCCTCCG GCCGCTTGGG 60  
TGGAGAGGCT ATTCCGGCTAT GACTGGGCAC AACAGACAAAT CCGCTGCTCT GATGCCGCCG 120  
TGTTCCGGCT GTCAGCGCAG GGGCGCCCGG TTCITTTTGT CAAGACCGAC CTGTCCGGTG 180  
CCCTGAATGA ACTGCAGGAC GAGGCAGCGC GGCTATCGTG GCTGGCCACG ACGGCGGTTT 240  
CTTGCGCAGC TGTGCTCGAC GTTGTCACCTG AAGCGGGAAG GGAATGGCTG CTATTGGGCG 300

310 320 330 340 350 360  
AAGTGCCGGG GCAGGATCTC CTGTACATCTC ACCTTGCTCC TGCCGAGAAA GATATCCATCA 360  
TGGCTGATGC AATGCGGCGG CTGCATACGC TTGATCCGGC TACCTGCCCA TTCGACCACC 420  
AAGCGAAACA TCGCATCGAG CGAGCACGTA CTCGGATGGA AGCCGGTCTT GTCGATCAGG 480  
ATGATCTGGA CGAAGAGCAT CAGGGGCTCG CGCCAGCCGA ACTGTTCCGC AGGCTCAAGG 540  
CGCGCATGCC CGACGGCGAG GATCTCGTCG TGACCCCATGG CGATGCCCTGC TTGCCGAATA 600

610 620 630 640 650 660  
TCATGGTGGA AATGGCCCG TTTTCTGGAT TCATCGACTG TGGCCGGCTG GGTGTGGCGG 660  
ACCGCTATCA GGACATAGCG TTGGCTACCC GTGATATTGC TGAAGAGCTT GGCGGCGAAT 720  
GGGCTGACCG CTTCTCTGTG CTTTACGGTA TCGCCGCTCC CGATTCCGAG CGCATCGCCT 780  
TCTATCGCCT TCTTGACGAG TTCTTCTGAG Ctc 813 (SEQ ID No : 35)

Fig.27.

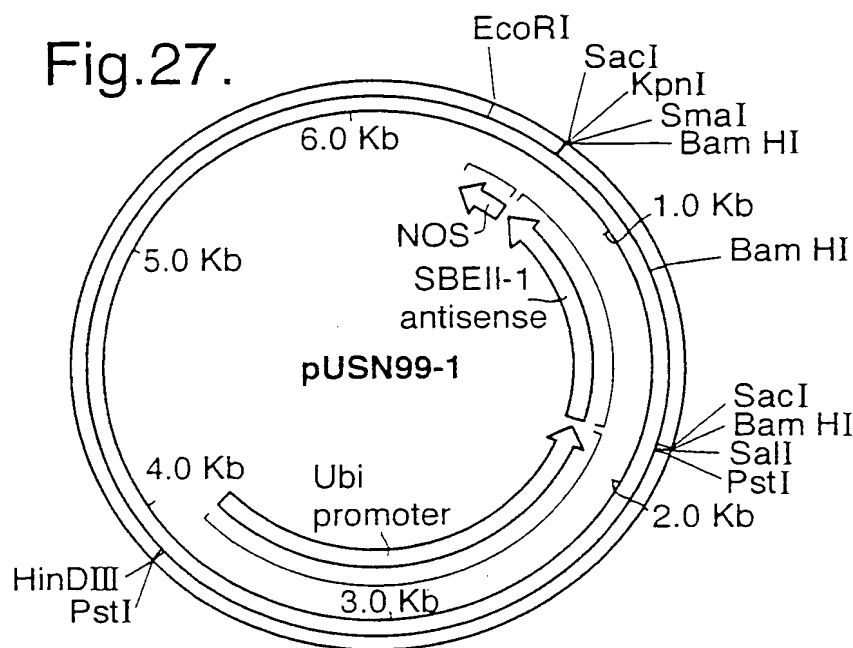
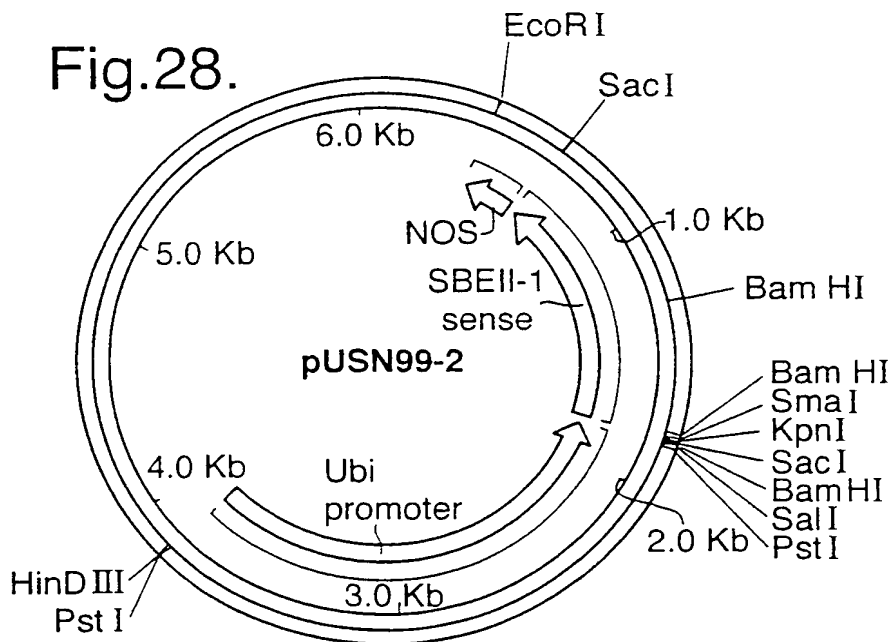
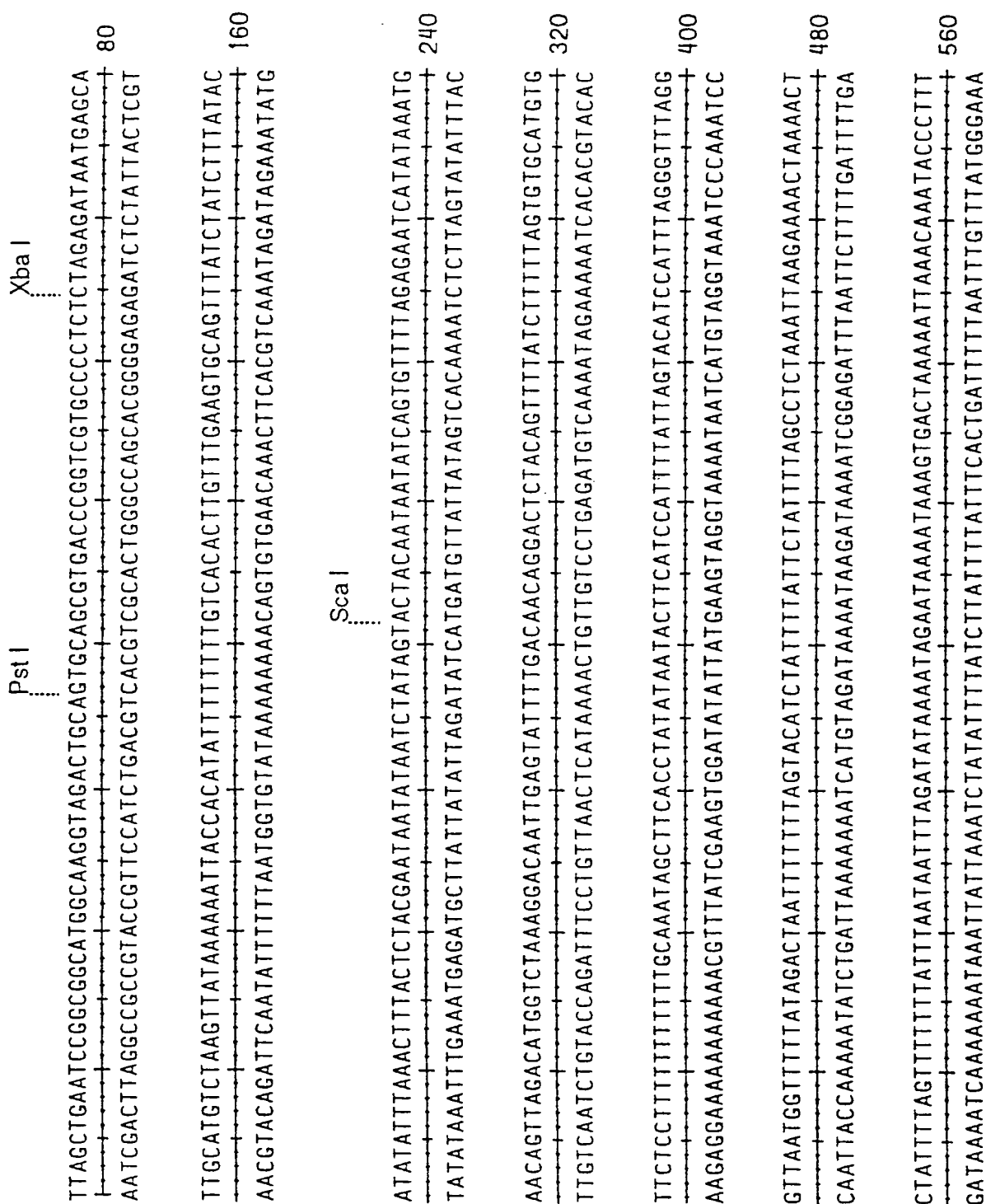
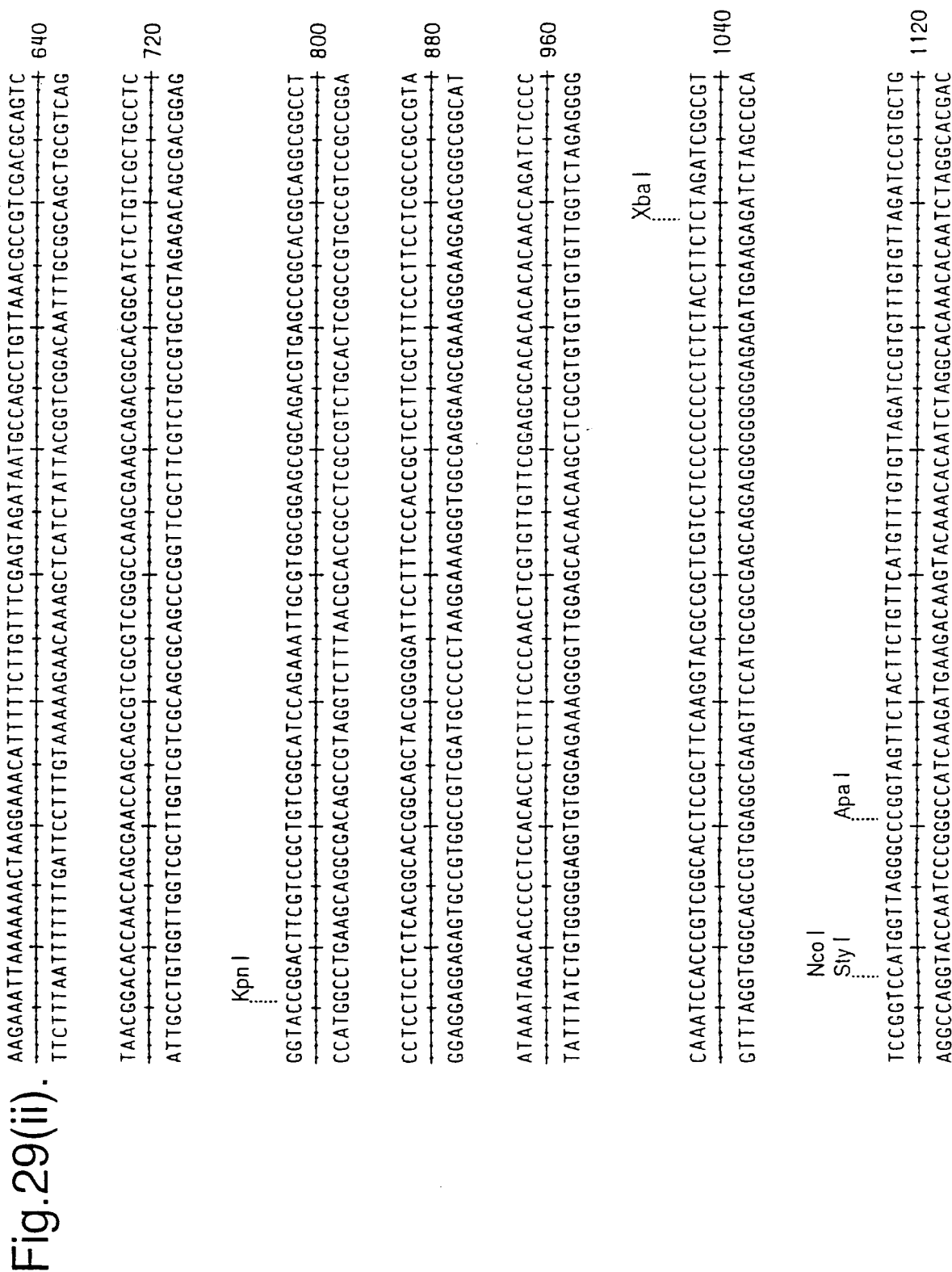


Fig.28.





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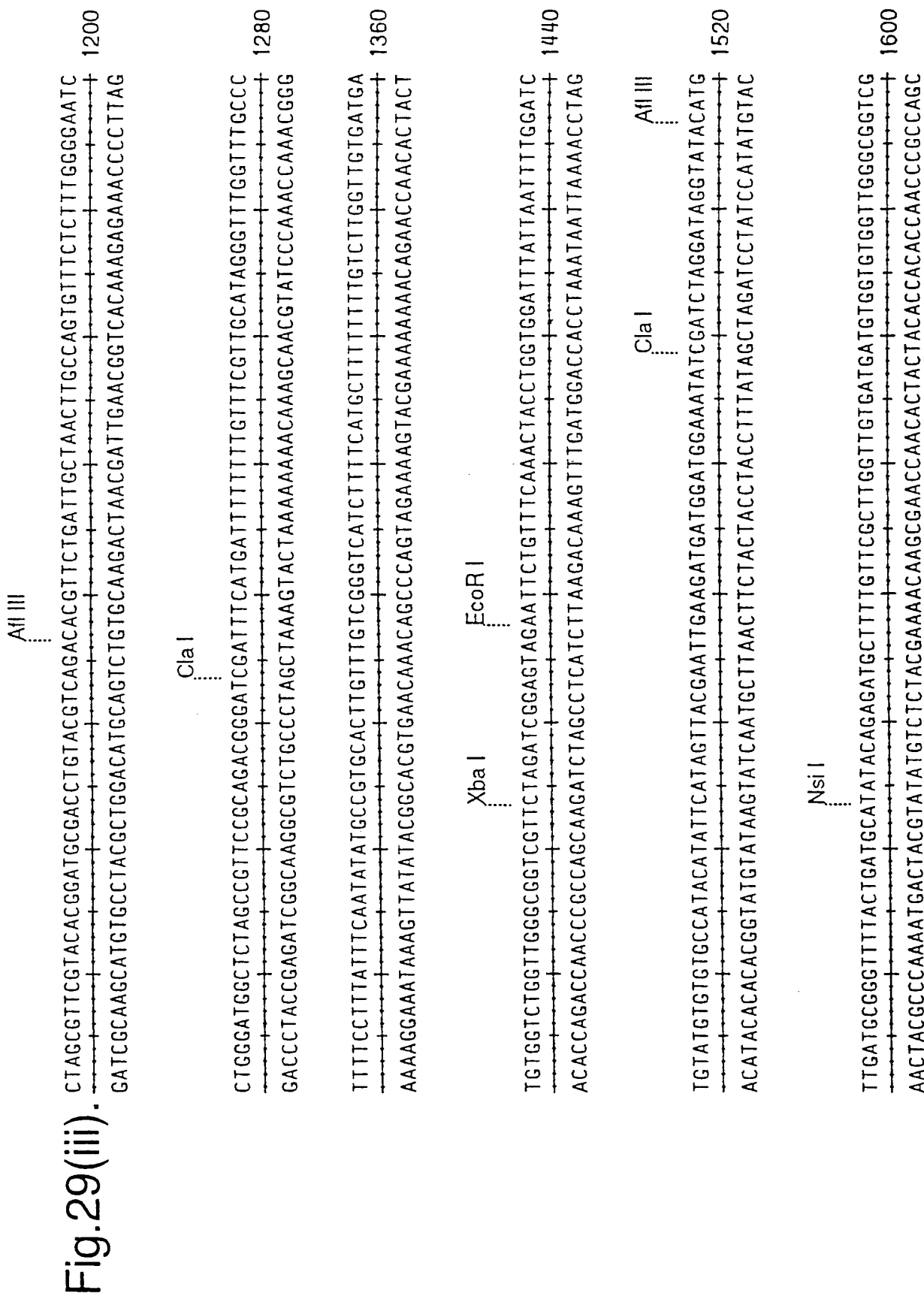


Fig.29(iv). Xba I

TTCATTGCTTAGATCGGAGTAGAATACTGTTTCAAACACTACCTGGTGATTTATTAATTTTGGAACTGTATGTGTGT  
1680  
AAGTAAGCAAGATCTAGCCCTCATCTTATGACAAAAGTTTGATGGACCACATAAATAATTAAACCTTGACATACACACACA

Cla I

Afl III

CATACATCTTCATAGTTACGAGTTTAAGATGGATGGAAATATCGATCTAGGATAGGTATACATGTTGATGTTTAC  
1760  
GTATGTAGAAAGTATCAATGCTCAAATTCCTACCTACCTTTATAGCTAGATCCTATCCATATGTACAACCTACACCCAAAATG

Nsi I

TGATGCATATACATGATGGCATATGCAGCATCTATTATATGCTCTAACCTTGAGTACCTATCTATTATAATAACAAGT  
1840  
ACTACGTATAIGTACTACCGTATACGTCGTAGATAAGTATACGAGATTGGAACCTCATGGATAGATAATATTATTGTTCA

ATGTTTTATAATTATTTIGATCTTGATATACTTGGATGATGGCATATGCAGCAGCTATATGTGGATTTTTTAGCCCCIGC  
1920  
TACAAAATATTAATAAAACTAGAACTATATGAACCTACTACCGTATACGTCGTCGATATACACCTAAAAAAATCGGGACG

Pst I

CTTCATACGCCTATTTATTTGCTTGGTACTGTTTCTTTGTCGATGCTCACCCTGTTGTTGGTGTACTTCTGCAGATGC  
2000  
GAAGTATGCGATAAATAAACGAACCATGACAAAGAAAACAGCTACGAGTGGGACAACAAACCACAAATGAAGACGCTACG

AGATCTTTTGAAAAACCTGACTGGCAAGACTATCACC 2038 (SEQ ID No : 52)  
TCTAGAAACACCTTTGGGACTGACCGTTCTGATAGTGG

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Fig.30.

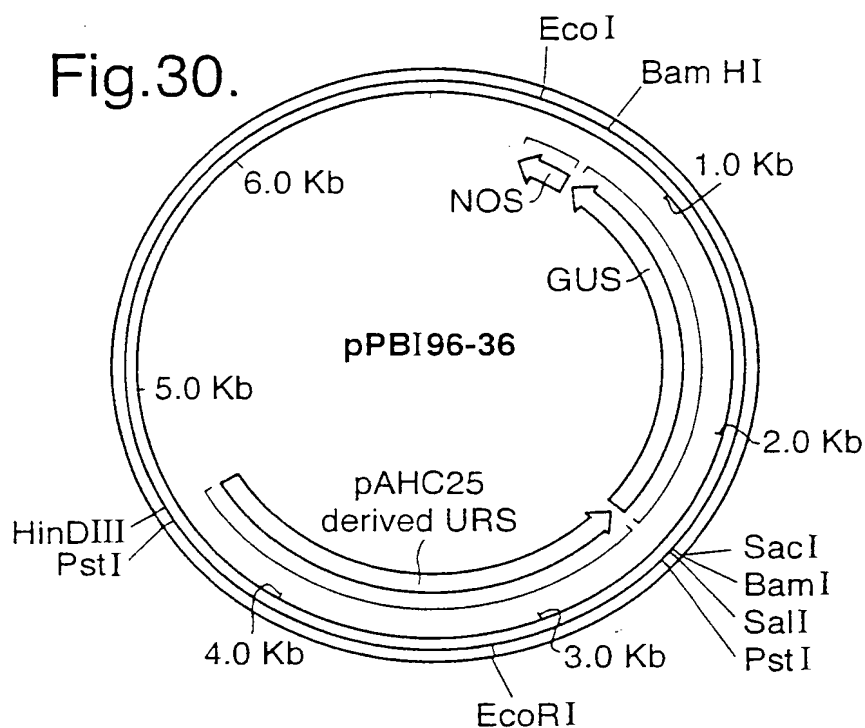


Fig.31.

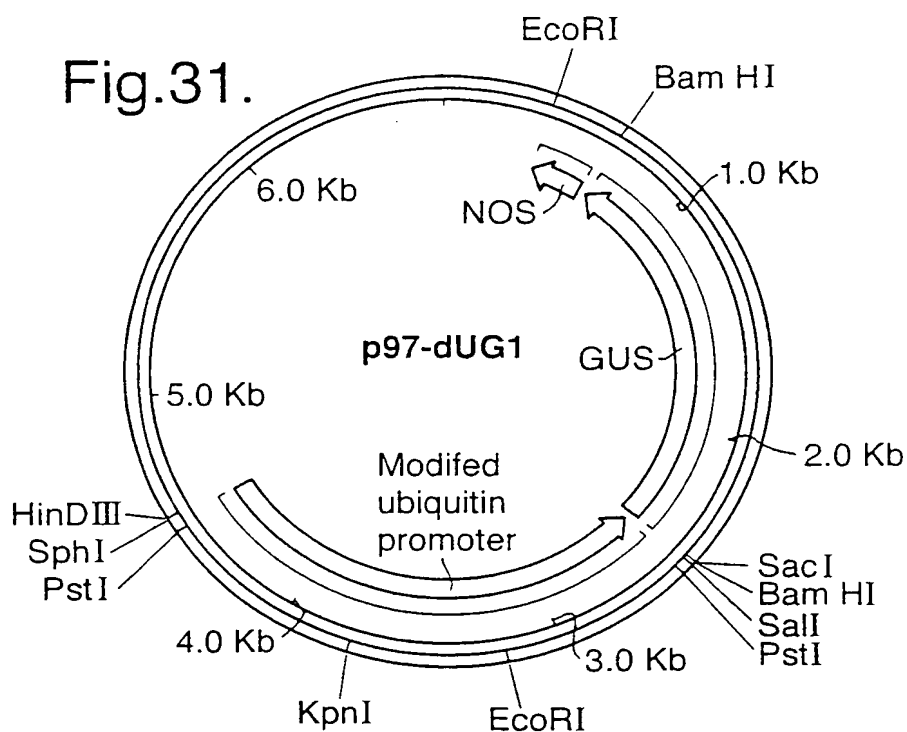


Fig.32.

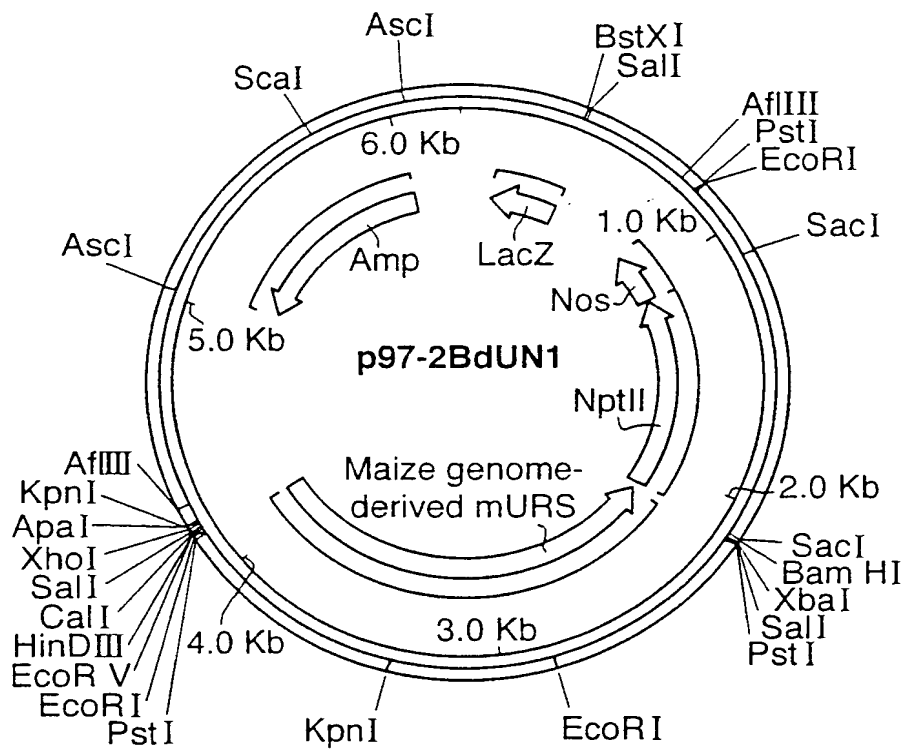


Fig.33.

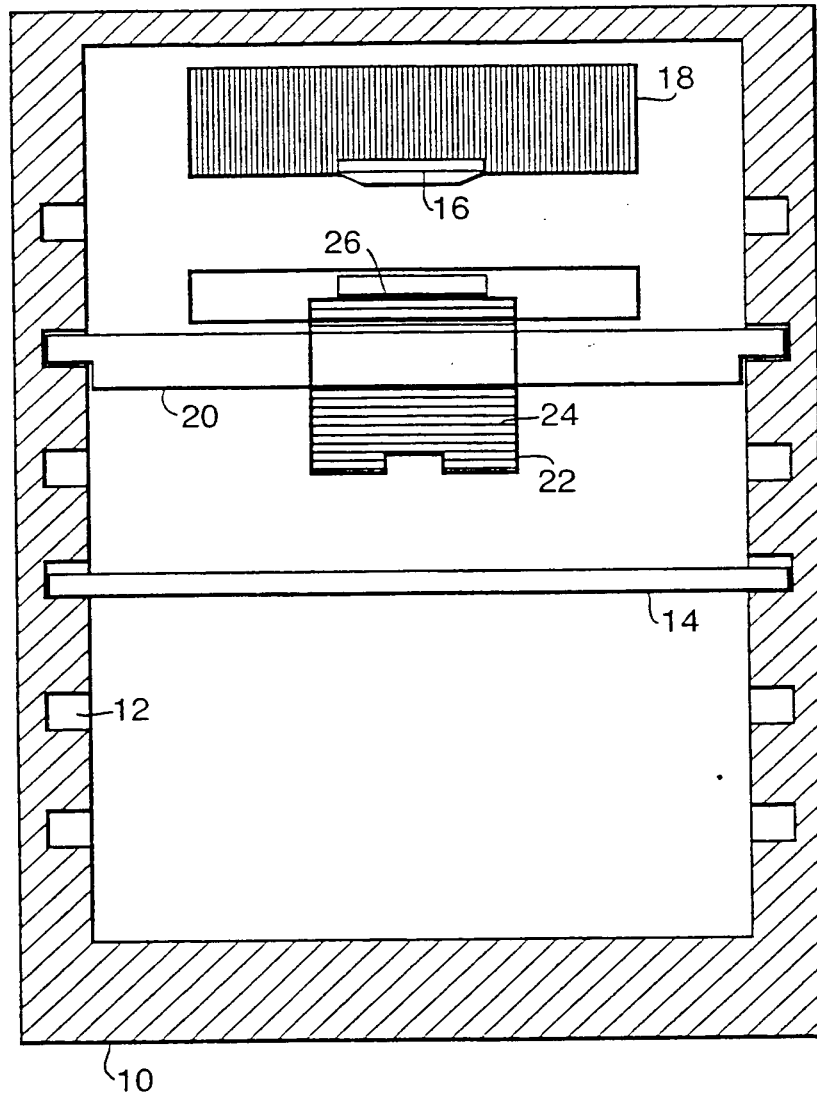
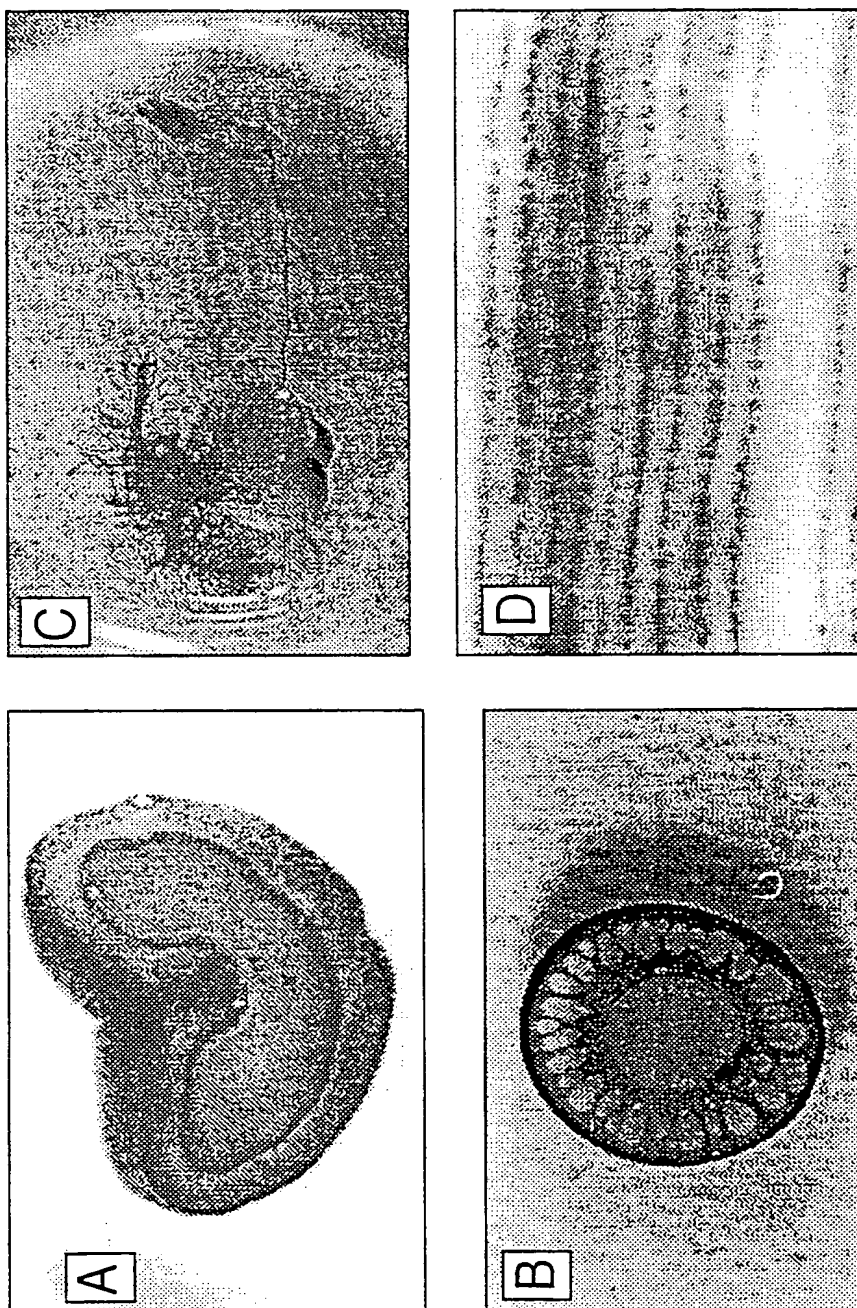
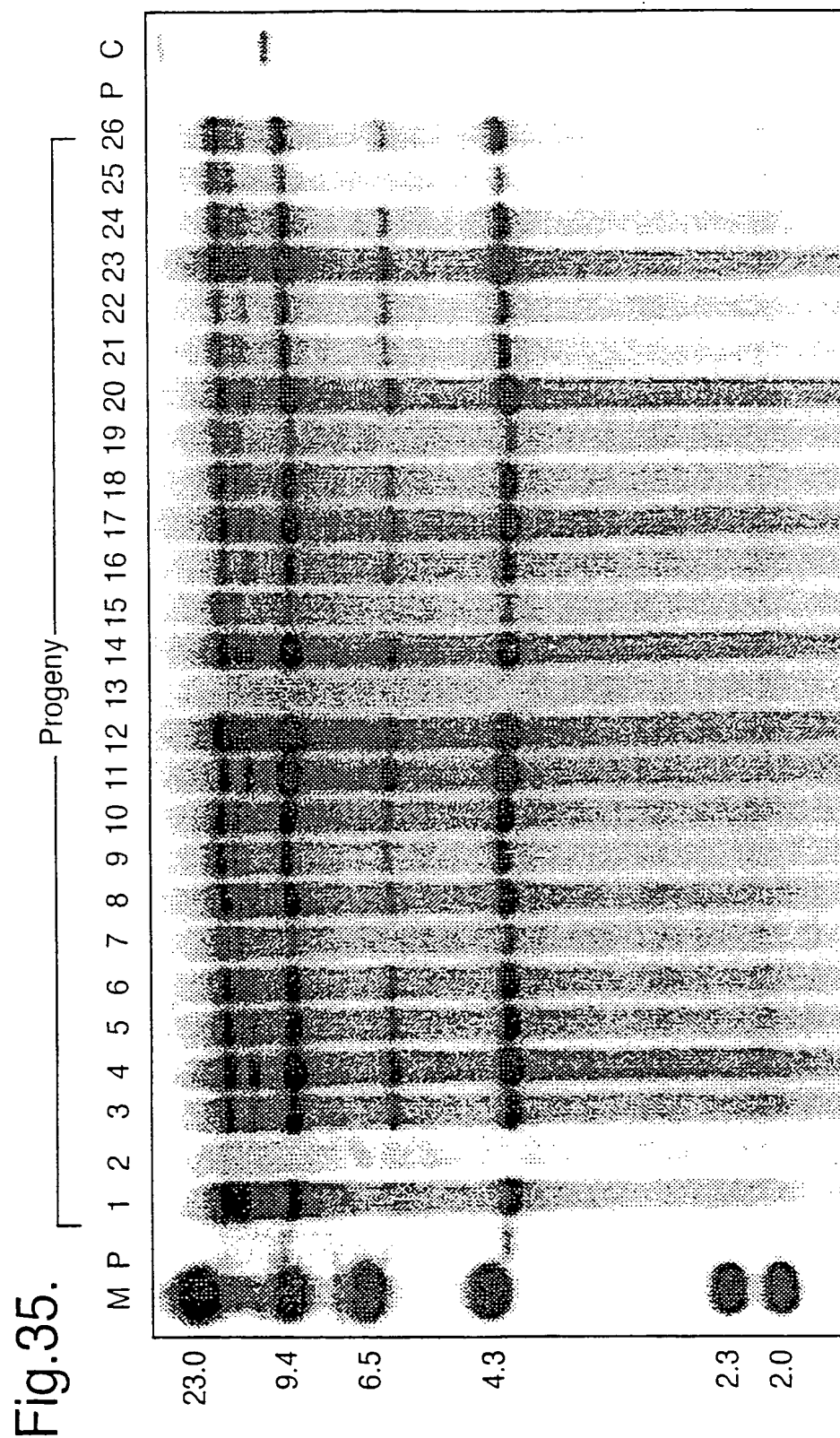


Fig.34.



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Fig.36.

